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ABSTRACT

Materials in this manual are designed to help educators raise the issue of nuclear war through a "day of dialog" on the subject. There are seven sections. Section 1 contains a project reationale; suggestions for implementation; methods for meeting resistance; tips for schoolwide, parent-teacher, and community discussion; uses of the media; and recommendations for follow-up activities. Section 2 outlines procedures for discussing the nuclear issue in grades K-3. Developmental issues to consider and logical discussion starting points are described and activities involving songs, books, creative writing, and art are provided. Following a discussion of developmental considerations and logical starting points, over 25 activities for grades 4-6 are outlined in section 3. Sections 4-6 treat the following project aspects for the secondary grades: where to begin, critical thinking skills, and classroom activities. Interdisciplinary in nature, activities include readings on Hiroshima, a reading on nuclear physics, a mapping exercise, a civil defense analysis, literature analyses, a debate, and community awareness projects. Section 7 contains an extensive listing of resources, including curriculum materials, audiovisual materials, and organizations. Appendices consist of a nuclear warfare study guide, organizational materials, and "day of dialog" case studies. (LP)

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DIALOGUE

A TEACHING GUIDE TO NUCLEAR ISSUES

SO 015 389

EDUCATORS FOR SOCIAL RESPONSIBILITY
23 Garden Street
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This curriculum guide was a project of the Boston Area Chapter of Educators for Social Responsibility.

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EDUCATORS FOR SOCIAL RESPONSIBILITY is a national, non-profit membership organization of parents, educators and concerned individuals who believe we must respond sensitively and directly to children's fears and questions about the threat of nuclear war, as well as addressing the related issues of the nature of peace and the importance of citizen participation. ESR researches and evaluates educational materials, develops curricula, sponsors conferences and professional development programs for teachers, and offers speakers, workshops and consulting services.

We would like to thank the ESR members and other concerned contributors listed on the facing page who gave generously of their time and talents to bring this Curriculum Guide into being. They generated, shared, refined and put down on paper their ideas for the exploration and teaching of nuclear issues. For their commitment and efforts we are wholeheartedly grateful.

The next steps are yours. Use this Guide in whatever ways are most appropriate for you. Let us know, via the Feedback Form on the next page, how it worked for you and how we might improve it. And, most important, please join your efforts with ours!

Your membership dues will help make it possible for ESR to continue to offer curriculum materials and educational programs. Your efforts to pass on information about ESR's programs and goals will strengthen the network of those committed to educating for social responsibility. And your active participation in projects such as this will enrich the resources ESR has to offer. PLEASE JOIN US!

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1. How did you learn about this Guide?

2. How did you participate? (Please check appropriate boxes)

   Read the Guide ( )

   Participated: with students ( ) how many? _____
   with teachers ( ) parents ( ) others ( )

   Please give a brief description of what you did on the Day of Dialogue.

3. Which activities in this Guide did you use in class? Please comment on how effective these were and how they might be improved.

4. Was the organizing section in the Guide helpful? How might it be improved?

5. Are other teachers in your school involved in teaching about conflict resolution and nuclear issues?

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   Are you interested in learning more about ESR? _____

Attach and please forward your own activities that could be included in the next edition of the Guide.

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WHY A DAY OF DIALOGUE?

"The unleashed power of the atom has changed everything save our modes of thinking, and we thus drift toward unparalleled catastrophe." -- *Albert Einstein*

As educators, one of our main purposes is to encourage the growth and development of informed and active citizens. Yet we have often remained silent on the most critical issue facing our students as future citizens -- the prevention of nuclear war.

Our democratic way of life demands that we participate in the decision making process of our government. Participation requires that we be able to understand an issue and make intelligent choices and judgements. Most Americans are "undereducated" about nuclear technology and the very complex range of choices now being deliberated by our President and Congress. We have an obligation to insure that the next generation of citizens is educated to be able to confront these issues.

Part of our silence has been a desire to protect children from the knowledge of these weapons and the fear that this knowledge brings. Yet recent research has revealed that the possibility of nuclear war is on the minds of most young people. William Beardslee, M.D., and John Mack, M.D., in a study entitled The Impact on Children and Adolescents of Nuclear Developments, found that even young children know about and fear the danger of nuclear disaster. Students believe that weapons are here to stay, that peace is the time between wars, and that warring is human nature. It is necessary to explore and question these beliefs with students so they can become less despairing and frightened, more active and effective on their own behalf.

Children need a safe place in which to express their fears. They also need reassurance that many adults are trying to solve the problems we face. It is up to us to enable our students to feel hope for the future, and to recognize that they have some control over what that future will be like.

The evaluations from courses such as "Decision Making in a Nuclear Age" indicate that students feel empowered after studying the facts and options about nuclear weapons. A high school junior wrote: "I was nervous about taking this course because I try not to think about nuclear war but I think everyone should have a course such as this one. At least if we know what is happening or what could happen, we have a choice about what we can do. If we totally ignore it we're in big trouble."

ESR hopes that every school in the country will ultimately include in its curriculum a study of issues related to nuclear war and peace. To help schools begin to address the nuclear issue we must create a dialogue among educators, parents and students on how best to educate ourselves and students. A Day of Dialogue represents a day or several days in which a group of teachers, a school, a school system or a community can work together to initiate this dialogue. This first step is a unique opportunity to focus attention on the role that teachers and parents can play in supporting and educating students.

This resource guide is designed to help you plan activities for your Day of Dialogue that will fit the needs of your school and community. The level of awareness about nuclear issues will vary from community to community. Some have active peace through disarmament and peace through strength groups while

others have hardly dealt with the issue. This guide is a collection of possibilities; no single plan will fit all situations.

Your Day of Dialogue may represent your first step in raising nuclear war issues in your school or classroom. You may want to start simply with a class discussion or a meeting of interested teachers, administrators and parents. Whatever it is that you choose to do, it is at least a beginning. The process of effectively raising nuclear issues in your school will take time and thought, but should be an enriching and empowering experience. We agree with Dr. Robert Sperber, former Superintendent of the Brookline, Massachusetts public schools, that "Teaching about the nuclear age will give us a deep sense of helping to preserve the human race."

Because the nuclear issue involves a serious threat to our survival, it is a compelling and emotional one. It is also highly complex. We need to consider questions such as these:

> How can we overcome the fear, denial and powerlessness that people experience in discussing this issue?
>
> What is educationally appropriate for different grade levels?
>
> What is and is not appropriate for teachers to discuss with students?
>
> How can we teach critical thinking, decision making, and responsibility for participating in the democratic process?
>
> How can we nurture dialogue and debate while encouraging educators, parents and students to stand up for what they think is right?
>
> How can we help students and adults see that their acts create the world as it is and that they can reshape it if they wish?
>
> How can we be realistic about the dangers while giving ourselves and our students a renewed sense of hope and commitment?
>
> How can we broaden students' perspectives to include the future of the planet?
>
> Especially in time of budget cuts, low morale, low respect for teachers, and pressures from a range of sources, how can we afford the time or the money to include these kinds of social issues in an already tight curriculum?

We don't need to know the answers to these questions to begin to raise them! Together with our students we can explore our feelings, confront the threat of nuclear weapons, and think about positive solutions. What is truly important in a democratic society is that we begin to raise these questions with our friends, colleagues, students and neighbors so that we can move beyond helplessness and apathy.

WHAT THE RESEARCH TELLS US

Relatively little research has been done in this country on the psychological effects on children of the nuclear arms race. There is some evidence to indicate that many children are aware of "the bomb" even at an early age and that this awareness can lead to a sense of insecurity and anxiety. With the current public debate and discussion of nuclear issues, we can anticipate that many more children will be hearing about these issues at an earlier age. The following article published in McCall's Magazine outlines the state of research into what children know and what effect their present level of information has on them.

McCALL'S / MAY 1982

THE FEAR THAT HAUNTS OUR CHILDREN

BY NATALIE GITTLESON

It is not so much their words that strike the heart, but their faces. The reality lies there, in their beautiful, young and strangely bereaved faces. "I had nightmares of the bomb slowly floating toward me. I could feel my blood spurting all over the place. But now it's better knowing it will all be so fast. . . ." Catherine has long flaxen hair, an angelic expression and worried eyes. She is 12 years old and attends a school near Boston.

Karen—same age, same school as Catherine—looks serious, burdened, older than her years. "I used to have nightmares when I lived in Mexico [as a second grader], not about mushroom clouds but a huge cannonball the size of the earth. And I would just see black, and it would smush everything, and there would be no salvation. I had the nightmare many times. But I never talked to anyone about it. I thought everyone would think I was weird." The nightmare has subsided, but as she ponders the future, her fear remains. "What . . . if you miss the joy of having children? You can't just stop because of a fear."

Stacey, 14, attends private school in a Boston suburb: "I have nightmares not about a nuclear war but about nothing being here afterwards. Nothing is in the dream, really, like a fog. Try to picture nothing. This world is not the way it is meant to be."

Even in this time of renewed debate about nuclear power, we who have become so skilled at blotting out the imminence of danger and annihilation may be surprised by the feelings and fears, questions and chronic bad dreams that beset the very young. Many psychiatrists and other expert observers, however, are not surprised. "We adults have entered into a kind of compact with ourselves *not to know*," which children, inexperienced at such avoidance techniques, do not share, according to William R. Beardslee, M.D., and John E. Mack, M.D., Harvard Medical School psychiatrists who carried out a new study titled *The Impact of Nuclear Developments on Children and Adolescents.*

Robert Jay Lifton, M.D., professor of psychiatry at Yale University, explains that, for many grown-ups, this compact takes the form of what he calls "psychic numbing." It is the almost willfully "diminished capacity to feel" that allows us not to know—emotionally. We cannot afford to incorporate "our knowledge of the destructiveness of nuclear weapons into our emotions," Dr. Lifton believes. "If we were to allow ourselves to feel what we know, we might not be able to go on; hence, the extraordinary gap we experience between our knowledge and our feelings."

Lifton first witnessed this phenomenon while studying survivors of nuclear attack for his award-winning book, *Death in Life: Survivors of Hiroshima.* "Right after the bomb exploded, they became psychically numb. It was a defense mechanism to close themselves off from death. 'Somehow, I became a pitiless person,' one survivor told me, 'because if I had pity, I would not have been able to walk through the city, to walk over those dead bodies . . . their eyes looking for someone to come and help them.'" Our own numbing "is perhaps one way to get through daily life," Dr. */turn to page 144*

THE FEAR THAT HAUNTS OUR CHILDREN

continued from page 77

Lifton acknowledges. "But it is not a solution. Indeed, it may lead us right into extinction."

Dr. Lonnie Carton, a Boston psychologist and family therapist, puts it even more bluntly: While most grown-ups have learned to "keep preoccupied with success or making a living, the worry energy of children," unlike ours, has no release. "From perhaps the sixth grade up, they would have to live in a hermitage *not* to live with this fear."

Of course, no such emotional retreat, either real or symbolic, exists for today's children, as the Beardslee/Mack study confirms. (Their work was undertaken on behalf of the American Psychiatric Association's Task Force on the Psychosocial Impact of Nuclear Developments, whose chairman is Dr. Rita Rogers.) Because their futures are (or should be) longer than ours, children and adolescents may be even more vulnerable to "nuclear anxiety" and its profound psychic damage than their elders. Dr. Beardslee, on the psychiatric staff of Boston's Children's Hospital, and Dr. Mack, author of *Vivienne: A Study of Adolescent Suicide*, found young people "deeply disturbed about the threats of nuclear war," but also admitting and articulating their fears, unlike so many of us who "resort to denial and 'psychic shutdown.' "

"The implications are disturbing indeed," Dr. Mack says. "We may be raising a generation without hope, without promise of a future, cynical about the adult world and helpless to change it." But hopelessness and cynicism notwithstanding, both he and Dr. Beardslee were sometimes astonished by the strong, often eloquent answers to questions that were asked of more than 1,000 grammar- and high-school students around Boston, Baltimore and Los Angeles. For instance:

• What does "nuclear" bring to mind?

• Do you think you could survive a nuclear attack?

• Have nuclear advances influenced your plans for the future?

Among the images that the word "nuclear" conjured up among the children in the study were: big gray clouds . . . red warning lights . . . dead wildlife and dead human beings . . . Hiroshima . . . radiation . . . cancer . . . danger . . . death . . . sadness . . . corruption . . . waste . . . pollution . . . and the "terrible, terrible devaluing of human life." One child wrote, "All that comes to mind is the world's final demise. A total kind of holocaust."

Considering the possibility of their own survival, many of the children said: "No. Even if we weren't killed, we'd all have cancer in thirty years, and our kids would be mutants (not to forget what the land would be like!)."

Here are some of the fears that they voice about their futures:

"I don't choose to bring up children in a world of such horrors and dangers of deformation."

"I have now accepted the fact that there quite possibly will be an 'end of time.' "

"It has shown me how stupid some adults can be. If they know it could easily kill them [nuclear advances and the arms race], I have no idea why they support it."

Dr. Mack and Dr. Beardslee have continued their work among young people. "Since the initial administration of our questionnaires in 1978, we have noted an *increased* preoccupation and concern with the threat to their lives that the arms race represents," says Dr. Mack. Nevertheless, the few studies concerning children and nuclear war conducted in the United States during the 37 years since Hiroshima verify that the preoccupation itself is not new. They suggest that:

• Even very young children (under eight) know about the threat, and fear the danger, of nuclear disaster.

• The menace of nuclear conflagration "weakens and impedes" the healthy establishment of personal identity at a decisive time in life.

• Children tend to see peace as an absence of war rather than as an active process of conflict resolution and cooperation, and many regard war as inevitable, necessary and likely.

• Children are still taught to think of the organized killing as a natural, perhaps noble part of human experience.

The repercussions of "growing up nuclear" go far beyond bad dreams and vague images of disaster, as studies conducted among those who were schoolchildren during the early cold-war years of the 1950s further testify. Then, the fear of a menacing Russia inspired exercises in futility like the duck-and-cover drills that Robert K. Musil remembers so well. "I particularly recall the early atomic tests on television that showed a model house erected by the Army crumbling and disintegrating in the blast," says the man who directed the documentary series *Shadows of the Nuclear Age: American Culture and the Bomb*. "It was with that awful knowledge—we were not safe at all—that I experienced duck-and-cover drills and developed an early disillusion with, even disdain for, authority." Musil speculates that "the styles and explosions of the 1960s were born in those dank, subterranean high-school corridors near the boiler room where we decided that our elders were . . . unreliable, perhaps even insane."

Michael J. Carey, a historian trained in psychoanalytic methods, was Dr. Lifton's associate at Yale when he conducted his study of the nuclear memories of 1950s children. "The bomb drills, bomb scares and images of massive death" interfered with the capacity of these children to think of death as natural. "Unable to accept it as part of life's rhythm," difficult even under ordinary circumstances, "they equated death with annihilation," Lifton says.

Four themes emerged from Carey's study that continue to haunt these men and women in their maturity:

1. *The unreality of the nuclear "force."* "This gelatinous kind of glow with an eye! H-bombs looked as if they were alive," a psychologist remembered. "It's a kind of unreality hovering over you," said a West Coast accountant. "It's not real to think about it."

2. *The unpredictability of existence.* "It's just going to kill off everything," one man said. "It will cause the atmosphere to change and the winters and the summers," a nurse's aide from Mississippi predicted. "And the trees will not know what they do"—an almost Biblical image of nature demented in the wake of a nuclear war.

3. *The perception of the world as insane.* "We remain alive at the whim of a craziness that can make us disappear in an instant," as Dr. Lifton put it. A theater director from Iowa wryly remembered pocket meters to measure radiation: "I could never understand what good it was to *tell* you that you were about to die."

Talk of survival after a nuclear exchange seemed like a cruel hoax to those I interviewed," Carey says.

4. *The bland vocabulary of nuclear annihilation:* stockpiles, exchanges, scenarios, nukes, the button and the mushroom cloud. Words and images like these seemed to diffuse the threat, blunt the reality and offer false comfort. In fact, many of Carey's subjects acknowledged "fascination" with the whole phenomenon. "Just the tremendous power of the thing," said a poet in Philadelphia of his view of the mushroom cloud, "the incredible colors of the blast and the huge majesty!" For Dr. Lifton, turning the bomb into a "new technological deity" has become "industrial society's ultimate disease."

In light of all this evidence, which their own recent study confirms, Drs. Beardslee and Mack now question whether, among the young, the ever-more-appalling dimensions of the nuclear-weapons race, "are having an impact on the very structure of personality itself." At the center of every child's personality lies the "ego ideal," which, the psychiatrists explain, "is the image we carry within us of our best selves, or of what we would wish to be like." It is the outcome of a series of compromises that all children make with reality, starting at earliest infancy. Somehow they merge their young wishes and desires with the understanding that perfect fulfillment is, for the time being, impossible.

All children endure many classic disappointments while growing up, the physicians point out: the realization that they are relatively small and weak; for girls, the knowledge that adult sexuality and child-bearing are beyond reach; for both sexes, the knowledge that other children may be smarter, better athletes and even more lovable.

Crucial to development is a vision of the future in which they can see themselves possessing what they cannot now have—when at last they may become what they cannot yet be. These

goals—eventually realizable and worth struggling to achieve—compose the foundation of a healthy "ego ideal." But to build such an ego ideal, children must perceive life as stable and enduring, and they must perceive a future on which they can, to some degree, rely.

Parents have the obligation to consider an essential question: What may happen to ego-ideal formation in children, such as those in the APA study, who view society and its leaders cynically and their own futures as traumatically uncertain—particularly when they view, as the cause of that uncertainty, the folly and "stupidity" of the adults around them?

How has the spectacle of a whole society "sitting back and doing nothing as we prepare to blow ourselves up," in Dr. Lifton's words, impinged on the developing personalities of the young? Not only he, but every one of the psychiatrists who spoke out at the recent Boston conference on "The Threat of Nuclear War: Its Biological, Psychological and Social Dimensions," view it as a major cause of the mounting anxieties and consequent behavioral ills that have come to characterize so many members of a generation now in their teens: their sense of futurelessness—that nothing lasts, therefore all is meaningless; their fixation on space as a safe haven, a sanctuary, where survivors can remake their lives once we destroy the earth; the rise of cults, fundamentalism, apocalyptic movements and other rigid religious modes that claim young minds so needful of reassurance; the desperation that leads to drugs, to the search for altered consciousness and, sometimes, to suicide. All this may come, in large part, from the threat that nuclear war imposes, physicians say.

How can we help our children survive with healthy minds and healthy spirits? Perhaps paradoxically, by *not* trying to shield them from awareness, according to the behavioral experts. The best protection we can give is knowledge and understanding.

Helen Caldicott, M.D., mother of three and president of Physicians for Social Responsibility, says, "To know is terrifying, but not to know may be fatal. Most children are already very well-connected with what could become the ultimate reality. They have heard already that a single bomb could turn fall-out shelters into crematoria, demolish hospitals, break down our biologic immune mechanisms that breach the thin, protective wall against plague . . . and cause the survivors, as it has been said, to envy the dead.

"This nuclear vision may overwhelm the imagination, but the subconscious cannot block it out. And the young, with their higher degree of susceptibility, their more active imaginations, also have more fragile defenses. Some begin to believe it's easier not to grow up. Their angers, hostilities and fears start to motivate against living out the rest of their lives. The future seems too terrifying, too negative, too black. Others find it easier to band together in a peer group and hate the enemy. Often they define the enemy as the entire adult world."

The battle to blot out the bitter truth is inevitably a losing one, Dr. Lifton warns. "When parents shield their young, to protect them, it's usually an expression of their own adult 'numbing,' " he said. "It's an attempt to push the subject away."

Children who adopt the self-numbing attitudes of their parents often become emotionally insensible in other areas of life, he said. "And even if you succeed temporarily in 'protecting' your school-age child, it's only a matter of time until some terrifying image, some deadly bit of information, leaps out from the television or the news headlines." Far better then—if also far more difficult —to deal with the nuclear issue openly and honestly. "There has been too long a conspiracy of silence," Lifton believes. "And this conspiracy functions in families as well as in the public domain."

Of course, parents should exercise common sense and sensitivity. "Naturally, you would not expose a three-year-old to a film that shows the atrocity of Hiroshima," said Dr. Lifton, the author, most recently, of *The Broken Connection*. But by the time that child reaches 13, he has been struggling for some time to cope with the issue of mass destruction. His appetite for understanding, his intuitive grasp of fundamental ethical and moral dilemmas may never burn as bright again as it does in early adolescence. Grown-ups owe it to the young to examine with them the basic principles that underlie the revived nuclear debate.

George Kennan, former ambassador to the Soviet Union, has recently described our global plight in a way well within the intellectual reach of any young person: "This entire preoccupation with nuclear war," a preoccupation which appears to hold most of our government in its grip, "is a form of illness. It is morbid in the extreme. There is no hope in it, only horror. . . . Can we not cast off our preoccupation with sheer destruction—a preoccupation that is costing our prosperity and preempting the resources that should go to the solving of our great social problems?"

Hope *does* exist—in our historic ability, as a society, to get well, to recover from the illness, Dr. Mack points out. "Mankind has rid itself of other pandemics, like smallpox and plague; of social evils like slavery; and of mass psychoses such as the burning of hundreds and thousands of human beings by society in the sixteenth and seventeenth centuries, under the delusion that they were witches in league with the devil," he reminds us. "We can rid ourselves of the current irrationality that underlies the proliferation of nuclear weapons as well. But to do so, we must first know our ignorance and fears and handle their reality."

At the physicians' conference in Boston, Jerome Frank, M.D.—professor emeritus of psychiatry at Johns Hopkins University and author of the classic work *Sanity and Survival: Psychological Aspects of War and Peace*—spoke of some of the "current irrationalities" of this nuclear age we can, and should, scrutinize with our children.

How, for instance, shall we help children understand the paradoxical behavior of our leaders? "All of them believe that nuclear war would be an immeasurable catastrophe, yet they keep on piling up nuclear weapons, which, of course, makes war more likely all the time!" Dr. Frank points out. The major illogical process at work here involves the human need to "tame" a new, unprecedented threat by making it seem like an old, familiar one. Thus, our leaders perceive nuclear weapons as merely larger conventional ones, reluctant to acknowledge that they are of a totally different order. "The piling up of weapons *decreases* everyone's security, including that of the possessor," Dr. Frank observes. "The more weapons and the more persons who handle them within nations, the greater the likelihood that one will be fired by malice or by accident, thereby triggering computers poised to launch a nuclear exchange."

The second psychological process that concerns Dr. Frank—and that often confounds the instinctive morality of the young—regards what he calls our "image of the enemy. Its most striking aspect is that the image is always the same, no matter who our current enemies may be. *They* are invariably treacherous, cruel and warlike, while *we* are invariably peace-loving, honorable and humane." During World War II, when Russia was our ally, we applied the most chilling terms of opprobrium to Germany and Japan. Today, we apply to the Russians the very same epithets that, not so long ago, we gave to the Germans and Japanese. How can children's forthright moral vision fail to be confused?

Moreover, the implications for the future of such black-and-white modes of thinking are grave. "If we insist on demonizing Soviet leaders—on viewing them as total and incorrigible enemies, consumed only with their fear or hatred of us and dedicated to nothing other than our destruction—that, in the end, is the way we shall assuredly have them," George Kennan has warned.

Third, Dr. Frank attacks the fallacy that obstructs so much contemporary thought, including that of children: Because man is naturally violent, war is inevitable. "This makes no more sense," he says, "than believing that because man is a carnivore, cannibalism is inevitable. . . . Social institutions wither away when they lose their function. And war is rapidly losing its function as a means of solving political disputes."

continued

Mothers, more effectively than anyone else, Dr. Lifton believes, can expose such "terribly dangerous falsehoods" as those that Jerome Frank held up. They can help their children sharpen the mental and emotional tools they will need to bring this chaotic world that they inherit from us closer to peace. "Every family is a place for the potential exchange of information, a rich source of constructive attitudes and action," he says.

We can reassure the young by our own involvement and by opening ways for them to participate in the search for solutions and in the nuclear debate that must so profoundly affect the rest of their lives. At Brookline High School, a 13-year-old boy elected a course on "Decision-Making in a Nuclear Age." He reported to his parents that, although he was "scared" by what he learned about the nuclear threat, he was glad that he took the course. "Now I can try to do something to stop it."

We can struggle together, as families, over hard questions like prejudice, violence, racism, nationalism versus internationalism, the way we see the enemy, whom we hate and why—questions not susceptible to easy or even to "right" answers. We can determine to listen to our own voices, to speak out of our own convictions and to say to our children what we honestly feel.

As parents, we can press for nuclear education as an aspect of current events or contemporary history in the secondary schools in our own communities. "Education itself can change the political climate, as it has already begun to do," Dr. Lifton says. "But it is an intellectual and moral scandal that ninety-nine and nine-tenths percent of American secondary schools still entirely avoid the subject. Although it remains the paramount problem in our culture and threatens to eliminate humankind, there is almost no systematic nuclear-weapons education, below the college level, in our teaching institutions."

Here and there, however, models do exist for what grown-ups and children can accomplish when they take action together. At the Northfield-Mt. Herman School in Massachusetts, with the aid of the school chaplain, they organized STOP, Students and Teachers Opposed to Nuclear Weapons. In Brookline, children on the grade-school level engaged in a letter-writing exchange with their peers in the Soviet Union. "This is who I am; I reach out to you as a human being," was the gist of the American children's messages. They described everything about their lives, from playing hockey to playing hooky.

Young people encouraged to use their energies in the service of such larger goals outside themselves, supported by like-minded adults, discover a kind of fellowship that is singularly enriching and that may provide a crucial bulwark against feelings of despair, hopelessness and helplessness.

Beginning on Sunday, April 18th, Ground Zero Week opens across the country. ("Ground Zero" refers to the point of detonation of a nuclear weapon.) This is one of the first hopeful signs of "a shift of consciousness, a turn from fragmentary to more formed awareness" on the part of Americans, as Dr. Lifton says. In churches and synagogues, schools and universities, libraries and art centers, at civic-group meetings and in private homes, people of all ages can learn together about the proliferating problems of nuclear war that we face. Here, as in all things, knowledge—augmented by understanding—is power. Ignorance enhances powerlessness. Only by directly confronting the overwhelming reality of our time, can we, as well as our children, begin to experience a sense of control over our own destinies—no longer immobilized, and no longer, as one 15-year old said, "so very alone with my own fear." ■

EDITOR'S NOTE: *The Beardslee/Mack study, titled "The Impact of Nuclear Developments on Children and Adolescents," appears in the A.P.A.'s Task Force Report #20,* The Psychosocial Impact of Nuclear Developments. *It will be available in June from the American Psychiatric Association, 1700 18th Street, N.W., Washington, D.C. 20009. For information, write to the Publications Sales Division.*

We obviously need to know more. We do not yet have a clear picture of children's ideas about the nuclear arms race, nor how these ideas develop and change. We do not know the impact their fears have on their thinking and planning. We do not know how adults can support children in dealing with their fears. We are confident, however, that we can begin to develop some plans of action after we have listened to our students, heard their concerns, shared our views with our colleagues, and participated in other ways during the Day of Dialogue. In order to take appropriate action, we must know more about our students and our own feelings. The Day of Dialogue is an opportunity to begin to find out.

A bibliography of the current research appears in the resources section of this guide.

GETTING STARTED

From our experiences in schools and classrooms, Educators for Social Responsibility (ESR) has reached two conclusions which may be helpful as you start to raise the nuclear war issue in your school. The first is that students want to know the truth about nuclear weapons, hear different sides of the debate on solutions, and decide for themselves what ideas to believe and support. It is therefore important and educationally sound for us to present a variety of positions. It does not mean that we do not take a stand for what we believe, but that we provide the opportunity for students to clarify their own positions.

The second conclusion is that there is a great deal of agreement among educators about the educational importance of the nuclear war issue when it is framed in a way that presents various points of view and allows students to make up their own minds. Choosing this approach also relieves some of the concern that students will be used as political instruments by adults or will be fed anti-government propaganda. This approach relies on a basic trust that through sincere educational dialogue and debate, the truth will surface.

The Day of Dialogue is simply a time to begin raising the issue of nuclear war in your school. One way to start is to *listen. Listen to your students' questions, concerns, thoughts and fears.* This not only serves as the basis for a moving discussion, but it also allows us to understand more deeply the nature of our students' needs. The more teachers you can involve in this listening process, the better. The activities that we suggest in this guide are as simple as a one-day activity or discussion for a single class, and as comprehensive as a student survey of high school students.

It is important to record your students' concerns in some way. Those concerns will form the base of your organizing efforts and your curriculum planning. Make a list of student statements that you can share with parents, teachers, administrators and the press.

Another way to begin the Day of Dialogue is to *talk with other educators, administrators, parents, and school board members about:*

1. what children and adolescents are thinking and feeling.
2. the educational importance of the nuclear issue.
3. what is currently being taught in the schools.
4. what might be taught on the nuclear issue.
5. how, when, and why curricula should be introduced in schools.

This might first take place in private conversations with your colleagues, or you might organize a meeting after school or in the evening. Try to involve a number of key decision makers as soon as possible. You will want both their advice and their investment in the process. There is a discussion of how you might run this type of meeting on page 17.

Once you have begun to raise nuclear issues in your school, it is important to *establish a means of carrying your efforts forward.* This may mean establishing a planning committee with set goals and deadlines, planning a future school-wide event or an in-service day, or establishing an ESR chapter or peace education committee.

The nuclear issue cannot be handled in one day, one week, or even one month. You will need to spend time helping your school approach this process in a systematic way. It may involve, for instance, finding appropriate places in the curriculum and willing teachers to work on it, reviewing existing curricula, or holding workshops for teachers. You will need to build on your initial efforts by setting a plan for the future that is appropriate for your school.

POSSIBLE PLANS FOR THE DAY

This resource guide is designed to help you plan activities that will fit the needs of your own school. What follows are some general ideas of the variety of activities that can take place on your school's Day of Dialogue.

1. Hold a classroom discussion or choose a classroom activity to assess what students know and feel about nuclear weapons and the threat of nuclear war.

2. Involve your department or a group of interested teachers in devoting one day to listening to what students feel and know. Meet after school to discuss what you found out.

3. Involve your school in a school-wide survey of student concerns, or an activity that assesses these concerns. Meet with a group to discuss the results and possible directions the school might take.

4. Call a meeting of interested educators to discuss strategies for raising the issue in your school.

5. Have a group of interested teachers phone or meet with administrators and school board members to discuss how best to approach nuclear issues in the school curriculum.

6. Spend a day listening to students' questions, concerns, and thoughts. Then hold a parent, teacher, and student meeting in the evening to discuss how best to educate students.

7. Devote a meeting of the PTA to discussing this issue.

8. Establish a planning committee to start work on developing classroom materials on the nuclear issue and finding ways to integrate them into the curriculum.

9. Invite a speaker to talk to your faculty about education and nuclear issues.

10. Organize a teacher in-service workshop on teaching about nuclear issues or initiate a study group.

11. Meet with a group of interested students after school.

12. Bring in a speaker or film or hold a debate for an assembly of students. Meet with interested students and faculty after school.

13. Organize part of the day or the whole day for a symposium on the arms race and nuclear weapons. Topics of discussion might include the following:

    * the physics of an explosion
    * the medical, social, and environmental effects of a nuclear war
    * the history of the arms race
    * the basis for the fear of the Soviet threat
    * proposed solutions and actions people can take to become involved

14. Use the day to begin a week-long series or weekly series of films, speakers, and workshops on the arms race, including a dialogue to help students process the information.

Regardless of which approach you decide to take, keep in mind that your goal is to involve as many people as possible in the educational process. In Appendix C are several case studies of Days of Dialogue that can be used as examples.

BUILDING SUPPORT

Broadening your base of support strengthens your immediate efforts, adds to your credibility, and prepares your school community for important next steps. While the way you organize this support will depend on your school and community, it is important to involve as many members of the school community as are appropriate. This could include other teachers, the superintendent, school board members, the teachers' association or union, parents, the city council, and the press.

Initially it helps to form a small planning group that can share the work and provide moral support for each other. This group can act effectively to contact the teachers, administrators and community members who should be involved in the dialogue.

Teachers:

Begin by talking with those teachers you think would be interested. Share this resource guide with them. As soon as you can, invite other teachers to participate. In Appendix E are examples of letters that you can place in teachers' mailboxes. You may want to include "The Fear That Haunts Our Children" (see page 5).

If you feel that a more direct political and economic appeal would be effective, adapt the sample flier in Appendix B.

Another way to involve your colleagues is to invite a speaker from a community group to speak to your faculty on education and the threat of nuclear war. Educators for Social Responsibility and Physicians for Social Responsibility have resource people and speakers available in many communities around the country, as do many other groups. At the end of such a meeting announce a follow-up meeting for those teachers interested in discussing how best to educate students and themselves about this issue.

Administrators and School Boards:

Key decision-makers in some systems may be the principals or department heads. In others it is the superintendent. In still others it is the school board. To build a stronger base of support it is important to approach these policy makers. Do not assume that they will oppose you. Approached in a non-threatening way, some of them may become your strongest supporters. It is important to choose the appropriate people and an approach that will allow them to feel a part of your work. The most effective approach is personal: someone they know talks with them, explains why it is educationally important for the schools to address this issue in a systematic way, and seeks their advice.

Even if you do not know these people personally, you can involve them. Write, asking either to meet with them or inviting them to an evening meeting with parents and teachers. There is a sample letter in Appendix B.

Parents:

While we do not wish to frighten students, raising the nuclear war issue in school will allow students to express their fears. Many students will have already expressed their concerns at home. We can help parents respond to their children in a positive way; we need parents' support for our efforts in school.

You may already have support: many parents are concerned about how to talk to children about their children's fears of nuclear war.

Some ideas for approaching concerned parents follow:

1. Talk to parents you know and parents who are active in the community and involve them in planning a meeting.

2. Send a notice to local disarmament network groups to publicize a meeting of parents to talk about what can be done in the schools.

3. Talk to the leadership of your PTA about using its next meeting to discuss how best to educate students about nuclear issues.

4. Ask your adult education program to provide or recruit a speaker to talk to parents on the topic and announce a meeting of interested parents at the end of the speech.

5. Plan an open meeting for parents, community members, teachers, and students to discuss the role of the school in this issue and announce it through a letter sent home with your students or in a press release to the newspaper.

In Appendix B, you will find a sample letter to parents.

Students:

While it is important not to enlist students in adult issues, many middle and high school students may want to be involved in organizing a Day of Dialogue. Share your desire to begin a dialogue in your school

about nuclear weapons with them. Organizing for an event like this feels very empowering to students. You may wish to inform them of student organizations actively working on the nuclear issue. A letter to students from a student who is active in one of these organizations, STOP Nuclear War, appears in Appendix B.

MEETING RESISTANCE

The nuclear issue generates emotional responses. Many people fear the horror of nuclear annihilation, and want to protect their children and themselves through a severe reduction or elimination of nuclear weapons. Others distrust and fear the Soviets, fearing that the United States may lose its dominant position in world politics without nuclear arms: they feel the need for gaining self-respect as Americans through military strength. Some feel anger at the injustice of increased spending on the military when basic human needs are unmet, both in this country and throughout much of the world. Some view raising this issue as a questioning of our leaders, experts in government, and the patriotic defense of our country. Others simply feel it is inappropriate to raise this issue in schools.

Since a discussion of nuclear weapons and policies can provoke such a variety of deeply felt responses, it is likely that you will meet with resistance from some individuals when you try to talk about these issues. Often the resistance is based on a strong set of beliefs about politics, children and education. It is our challenge to respond to resistance in a way that is not confrontive, but rather helps all concerned to explore the educational importance of the issue.

Resistance often comes in the form of questions. To help you respond to these, we have included some common questions and some possible responses.

1. *Won't raising these issues in school create more fear in students?*

   We know that the fear of nuclear war is already on students' minds and is profoundly affecting their development. Children are made aware of the destructiveness of war and the potential of a nuclear war by the inundation of images carried by the media.

   As educators we must begin to understand what effect the fear of nuclear war has already had on our students and help them overcome those aspects of fear that come from ignorance and leave them feeling powerless. It is also important that we handle this in an age-appropriate manner. It would not be appropriate to educate young children to the explicit horrors of nuclear war; it would be appropriate to help them understand the sources of conflict among people and among nations, and the means of peacefully resolving those conflicts. It would also be appropriate to show them that adults are involved in protecting their future and to give them hope for a safe and peaceful future.

2. *Aren't these issues for adults, not children?*

Children are now growing up in a nuclear world. Many already experience a deep sense of fear and hopelessness that comes from feeling that they have no control over their future. Our role as educators is to prepare them for living in this world and we must help them acquire the knowledge and skills to cope with decision-making in a nuclear age.

Secondly, dealing with an issue that is being given such national attention brings relevance to the material students are studying. It will help them think critically, become creative problem-solvers, and assume responsible roles as citizens.

3. *Aren't these political issues that should not be presented in schools?*

These are political issues, and controversial ones, which is all the more reason to clarify them in a setting which fosters in-depth study of the issues, open debate on the alternatives, and reflection on intelligent choices. In this setting, students learn what it is to be responsible citizens and to participate in our national decision-making process.

4. *Are you going to present both sides?*

There are many more than two sides to these issues. Indeed, they are complex. Presenting the reasoning for all these sides is a vital part of helping students make their own decisions.

5. *At a time of budget cuts, low morale, low respect for teachers, and demands to include a wide range of special-interest topics into an already tight curriculum, how can we find the time and money to spend on nuclear war issues?*

There is no more critical or immediate issue than the threat of nuclear war. Teaching about this issue will help teachers feel empowered because they are helping to clarify an issue upon which may hang the future of the human race. It will also help to revitalize the school by demonstrating that it is a vital social institution that plays a key role in helping teachers and students gain some control over the experience of living in a nuclear age.

In 1983, 61 percent of every federal income tax dollar will go to military-related spending. The cost of the arms race is affecting the quality of education and reducing the number of teaching positions available. We need to consider carefully if this is the way we want to spend our tax dollars. (The Massachusetts Teachers Association, 20 Ashburton Place, Boston, MA, has prepared a short booklet entitled "Changing Priorities: Education vs. Military Spending in Massachusetts" that may help you in presenting this argument.)

In a statement written in support of developing and implementing the "Decision Making in a Nuclear Age" curriculum written by the Facing History and Ourselves Project, Brookline Superintendent Dr. Robert Sperber explained his own rationale for teaching about nuclear issues. His statement eloquently responds to many of the questions that are raised about bringing the issue into our schools. It appears in Appendix B.

ORGANIZING A SCHOOL-WIDE DAY OF DIALOGUE

ESR obtained some valuable information about effective organizing from the first Day of Dialogue. We share these insights with you in an effort to help you accomplish your objectives. Outlined below is one process for organizing your Day. Since circumstances vary, it is only meant as a general guideline.

Remember that you don't have to be an expert on the subject to organize a Day of Dialogue. You just need to be concerned enough about the arms race and the threat of nuclear war to raise the issue. The purpose of the Day of Dialogue is to discover and learn together.

1. By talking informally with your colleagues, identify a few others who think a Day of Dialogue is a good idea. Meet and discuss what might be the most appropriate plan for your school.

2. Together, arrange a meeting with the key administrators in your school. Some suggestions for preparing for this meeting are:

   -- Go to this meeting prepared to discuss your interest and concerns in a clear, concise and objective manner. If you plan to discuss nuclear issues, your purpose is to persuade people that discussion of these issues is healthy in a democracy and that you advocate the inclusion of various points of view. If, as in most elementary schools, your goal is to listen and respond to student concerns or to celebrate peace, you may need to outline how this will be done sensitively.

   -- Be prepared to propose a number of possible activities involving students, faculty and parents. It may be helpful to copy the activities you especially like from this guide to focus the discussion. Ask the administrators' advice on what might be most appropriate and how you might best involve faculty and parents as well as students.

   -- While you should assume that your efforts will be met with cooperation and support, expect expression of sincere concern that students not be excessively frightened or that the presentations be propagandistic. Welcome these questions and express that you share the same concerns that the Day be done with sensitivity and in an educationally appropriate manner. Avoid buzz words such as "warmongers".

3. If your administrator declines to approve the Day on a school-wide basis after a full discussion, clarify whether the Day may proceed in classrooms with interested teachers.

4. If your administrator agrees to support your efforts, ESR suggests the following ideas:

   -- Arrange a faculty meeting to discuss the Day and ask the administrator to introduce the subject and to present you as the coordinator.

   -- Follow a similar approach to the one outlined in #2 in introducing the Day to your colleagues.

   -- Be ready with handouts either of your own making or copied from parts of this manual to facilitate the discussion.

   -- Focus on the creation of a committee to draw up specific plans for the Day. Try to involve as many of the faculty as possible.

Anticipating the kinds of issues that it will have to address, the committee should be concerned with:

   -- How much time will the Day of Dialogue take? The Whole day? Part of the day? A week? Should it be one day and then gradually become part of the curriculum?

   -- What about teachers who choose not to participate?

   -- Should students be involved in the planning?

   -- Will outside resources be used? Who will identify them?

   -- Will there be costs involved in the project? Where will the money come from?

   -- Will there be parents involved in the planning?

ESR would suggest that the committee find a way to keep the faculty informed about the plans for the Day of Dialogue through meetings, memos or written newsletters. In a junior or senior high school, you might want to have a representative on the committee from each department to facilitate communication. After the Day of Dialogue, your planning committee can be the core of a long-range planning group that will begin to explore ways of integrating these issues into curriculum on a formal basis.

Some communities have complex procedures for obtaining approval for a project like the Day of Dialogue that will deviate from the approved curriculum even for a day. It is worth going through the necessary process to obtain approval for the Day of Dialogue even if the actual Day is postponed many months. In some situations it may be helpful to raise awareness among parents of children's concerns and have parent and community support before presenting a plan for a Day of Dialogue to administrators or school boards. A discussion of how you might best organize this follows in the next section.

In Appendix C, there are a number of case studies of school-wide Days of Dialogue that may help you plan your own.

CONSIDERATIONS ON AN EVENING PARENT-TEACHER MEETING

The size and setting of a first meeting can range from an informal conversation among a dozen concerned teachers, parents and older students in a living room, to a large gathering in a school auditorium with a film and/or presentation by invited speakers. Regardless of the size, our experience suggests that there are several important principles to keep in mind:

Setting the Tone: One person should be designated moderator for the discussion and should begin with a brief explanation of the purpose of the evening. Three key questions have emerged from meetings which we have been asked to moderate:

1. What are students' questions and concerns about nuclear war and nuclear weapons?

2. What is currently being taught in schools at different grade levels?

3. What would we like to see taught, and how do we begin developing and piloting new curricula?

If your group does not feel that it knows enough to discuss children's questions and concerns about nuclear war issues, you might want to start with the second question. However you start, try not to less the discussion bog down in a debate about what political point of view should be taught (e.g. pro-freeze, peace through strength, unilateral disarmament). *Keep the focus on children's needs*, rather than on adults' opinions about the issues. Agree at the outset that we do not want to propagandize in the classroom, but instead want to give students the information and support they need for making their own decisions. It is our goal both to teach the skills of critical thinking and to nurture hope for the future.

Using a speaker and films: Speakers and films are useful to focus the discussion. A number of communities have held effective meetings which included a panel of a psychologist, an ESR speaker, a student, and an administrator, teacher or religious educator. Each spoke for 10 to 15 minutes and then the moderator opened up the discussion for questions. This format lends authority to the presentation but also adds a formality that may detract from a more freeflowing discussion.

There are a number of films and videotapes which present the psychological impact of the threat of nuclear war on children. These include:

THERE'S A NUCLEAR WAR GOING ON INSIDE ME. A 21-minute videotape which shows segments of 3rd, 5th, 7th and 9th grade classes discussing what they know and feel about nuclear weapons. It is available from the national ESR office (23 Garden Street, Cambridge MA 02138) or your local ESR chapter.

BOMBS WILL MAKE THE RAINBOW BREAK. A 15-minute film or videotape of students expressing their thoughts and concerns filmed shortly after the June 12th, 1982 demonstration in New York City. It interviews students involved in the letter-writing to the President sponsored by the Children's Campaign for Nuclear Disarmament. It is also available from the national ESR office.

IN THE NUCLEAR SHADOW. A 25-minute film which juxtaposes individual interviews with students ages 7 through 17 with speeches by Robert Jay Lifton and John Mack on the psychological impact the nuclear threat is having on children. This very powerful and emotional film is available from The Educational Film and Video Project, 1725B Seabright Avenue, Santa Cruz CA 95062.

In using one of these films, you should be careful to preview it and present it appropriately. These films are so powerful that some adults feel that the children have been manipulated and that their statements are being used to manipulate adults. They can be used effectively with the proper introduction. A page of suggestions for using these films is available from the national ESR office.

Involving Students: Some people initially may feel uneasy about inviting students. We have found, however, that even children as young as eleven or twelve can contribute a great deal when they are encouraged to speak up. The student who complains of having covered all of World War II in a history course in two days in June often makes the most compelling case for the issue to be treated with greater thoroughness.

One note of caution: high school students are sometimes overly critical of their teachers or courses because they are idealistic and want more than they have received. Try not to let "You've let us kids down" become a dominant theme. This is an important point of view for adults to hear, but high school students may not realize how hard it is to deal with the nuclear issue in the classroom; nor do they always recognize their teachers' efforts.

Avoiding Adversarial Discussions: Some people who feel very strongly about the issue tend to push harder than they need to. Try not to let the topic become "Why aren't schools doing more?" but, rather, keep it objective: "How is the issue being dealt with now?" "How might the schools' and parents' efforts to help children deal with nuclear issues be improved?" The moderator may have to intercede and remind people of the purpose of the discussion. Our experience has been that school administrators and teachers welcome support and advice about how to deal with these issues, *when they are convinced that no one is grinding an axe or looking for a scapegoat.*

Supporting Teachers and Administrators: In the later part of the discussion, the moderator should find time to ask the teachers and school administrators present what kind of help or support they want. We have found that sometimes teachers want parents to write to the school superintendent asking that more be taught on the nuclear issue, or that school superintendents need parents to lobby the school board for its support so that the superintendent doesn't feel alone in taking risks. *Listen carefully for ways to support the best of what may already be happening in schools.*

Following up: Leave the last half hour of a two-hour meeting to talk about the next steps. Look for concrete suggestions:

* forming a student-teacher study group or a parents' study/support group
* writing letters to school administrators
* developing a questionnaire for students
* forming an ESR chapter or, at the high school level, a Student/Teacher Organization to Prevent Nuclear War (STOP) chapter
* holding a symposium

Ask for individuals to take responsibility for chairing subcommittees or accomplishing specific tasks. Try to set a next meeting date for people interested in working on follow-up activities. And don't forget to get a list of names, addresses, and phone numbers of everyone who attended the meeting, and of those who want to keep working on the issue.

One final caution: leave time for people to ask plenty of questions during the meeting and to talk informally over coffee afterwards. If you have a panel presentation or film, limit it to the first 45 minutes of the meeting. Try to keep the formal part of the meeting to no more than two hours, and announce your ending time at the beginning to help people use the time well.

You don't have to have a lot of experience to run a good meeting, but you do need to be clear about the purpose of the discussion and what you hope to accomplish. Don't be afraid to offer leadership when you feel the discussion is off the topic.

ORGANIZING WITHIN PROFESSIONAL, POLITICAL AND COMMUNITY GROUPS

If you have built a base of support, you can bolster -- and formalize -- your efforts by presenting official recommendations to your teachers' association, school committee, and/or city council for approval. This serves to involve and educate more people; it also gives an official mandate to the school administration to act.

On the other hand, few teachers like to be told how and what to teach, so this mandate should come as a culmination of the efforts of fellow teachers rather than an unwelcome command from above.

You have a better chance of having your resolution passed if you lay your groundwork carefully:

1. Build enough support among teachers, parents, and community members so that these people are willing to call and write to your association, school committee, and/or city council, and to be present and possibly to speak at the meeting at which it will be considered.

2. Be clear about your goals and prepared to respond to questions.

3. Personally contact the leaders of your association and supportive members of the school committee and/or city council to discuss the need for a resolution, the possibility of its passage, and a strategy to get it passed.

4. Provide adequate information to these groups such as statements of support, appropriate portions of this resource guide, the APA study on "The Impact on Children and Adolescents of Nuclear Developments", the article in the May, 1982 issue of McCall's on "The Fear That Haunts Our Children", the Massachusetts Teachers Association booklet "Changing Economic Priorities", and articles that stress the importance of the issue (see bibliography). Spend time educating these people so that some of them can be effective spokespersons for your resolution. Call them or meet with them to discuss what they have read and questions they might have.

5. Have people call and write just before the resolution comes up, urging support.

In Appendix B is a resolution that might be used before any of these groups to support your Day of Dialogue. Similar efforts have been successful in a number of communities in the Boston area.

After your resolution has passed, be sure to write a letter of thanks to those people who helped you. This recognition and gratitude is a vital part of letting people know that they have made a difference.

USING THE PRESS AND MEDIA

The press can be a strong asset in providing the public with information and in announcing your efforts. It can improve the image of your school and encourage people to do more because of the recognition. It may also be your best means of advertising. Remember, however, that the image you present will reach thousands of people and, good or bad, it may stick with you. Also remember that with all your best preparations the press will report it the way it wants to.

Here are three good ways to get coverage in the press:

1. Write a letter to the editor about the importance of educating children about issues related to peace and nuclear war and announce your Day of Dialogue. Your letter to the editor should be brief, not over 300 words. Be specific. Type it, double-spaced, and sign it. Always include a phone number in case the paper wants to check the authenticity of your letter. In Appendix B is a sample of a letter to the editor that was printed in the Boston Globe.

2. Write press releases about specific events such as your Day of Dialogue, a symposium addressing issues of nuclear war, or any endorsements you have received. Remember that having the press there will change your event. Will its presence help or hurt? If you want the press involved, inform them fully and demonstrate the newsworthiness of your event. It helps to send them a "press packet" that includes:

   * a hand-written cover letter specifically stating what you are doing
   * a press release on your event
   * a series of articles from other papers and magazines that substantiates the newsworthiness of the event
   * a page of students' quotes that you and your colleagues have collected from listening to students

In Appendix B is a sample press release and some articles that you can duplicate and include in your press packet. We also suggest that you include the McCall's article, "The Fear That Haunts Our Children."

Some helpful hints in writing a press release are:

* Early in the release include the time, date, place, participating groups, and the reasons for the event.

* Do not exaggerate information. Make it interesting. Define the basic two or three points you want to make and avoid extraneous information.

* Include some striking quotes to demonstrate support or need.

* Limit it to one page, if possible. Never exceed two pages. You can include additional pages of background material, but these should be clearly separate from the press release.

* Double-space and use large margins. Use one side of the paper.

* Make it clear who is releasing the statement and who can be contacted for more information. Include names, addresses, and phone numbers of members of your group who can be contacted.

3. Encourage your newspaper or TV station to do a detailed article or segment on education and the nuclear war issue, as well as to report what is being done locally. A feature like the newspaper articles presented in Appendix B can build community support by helping people understand what you are trying to do and why. It may take some coaxing and personal discussion with the reporter or editor, but it will be worth it.

THE MORNING AFTER

Your Day of Dialogue will create a great deal of energy. Make good use of the momentum you have gained. In the following section of this guide, you will find a wide variety of ideas for follow-up in your individual classes. Here are some general suggestions:

* Schedule a meeting within a week of the Day of Dialogue to evaluate the results.

* Set up a committee to continue planning and initiating efforts, with concrete tasks and deadlines.

* Create a plan to get an official mandate for a nuclear education program.

* Plan for a review of existing curricula or teacher in-service workshops.

* Have your librarian order books and curricula on the nuclear issue and on conflict resolution and place them on display in the library.

* Keep track of what is done in individual classes as follow-up and share that with other teachers.

* Use the press to report on follow-up events in your school.

* Schedule a symposium for the whole school in the spring.

* Set up an ESR chapter for teachers and parents and a STOP Nuclear War chapter for students.

* Let ESR know what you have done, and what you hope to do in the future. Use Educators for Social Responsibility as a source of advice and information.

THE K-3 CLASSROOM

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DEVELOPMENTAL CONSIDERATIONS

As teachers in grades K-3, we work with children who have a wide range of needs and experiences. Differences even among children of similar age are dramatic. When you begin to look at the material in this guide, you will have to decide where to start, taking into account what you know about the individual children you teach: their interests, fears, developmental levels, and experience. Do they live in an urban, suburban or rural setting? What do they fear in their day-to-day living (street crime, divorce, tornadoes)? Do you have five year olds who are still uneasy about daily separation from their families or are most concerned with learning where the bathroom is in their new school? Or, do you teach third grade, where the children are increasingly preoccupied with fears of being left out of the group? Have any of your children experienced war directly (e.g. Ireland, El Salvador, Israel, Southeast Asia)? If so, they may have special information to offer; they may also need special support. Are there any whose parents commonly discuss world issues at home?

It is also useful to take into account the shared history of your particular classroom group. What are the themes of their play in the classroom? At recess? Has fighting or hitting become a common problem? Have the children had previous experience with open-ended group discussions about difficult questions? Have any nuclear or peace concerns ever surfaced?

Finally, consider what kind of approach to emotional issues around war and peace would make you most comfortable given your own feelings, thoughts, and experiences. Start with what feels right. You will probably want to start small and take on more later as you and your class are ready. You can decide for yourself whether you are willing to state a particular opinion as your own. You may prefer to describe a range of possible opinions using the phrase "some people think...". Please let us know what worked well with you, since we are all trying to develop an understanding of children's concerns and appropriate adult reactions to them (a feedback form is enclosed for that purpose). The nuclear arms race is a sensitive issue, and we are at a relatively early stage of trying to deal with it in schools. It is all right to say, "I don't know."

An outline of general developmental issues for children of this age range follows. Later, we focus specifically on spontaneous conversations during children's play and on group discussions. Following that is a section on activities that the teacher can introduce to the class, using books, art materials, creative writing, story-telling, songs, or planned discussion.

Children's concerns tend to be personal and concrete. When children express their feelings about war and peace in artwork, they often reveal a focus on the themes of house and home, family, personal safety and comfort. Their anxieties about war may resemble their worries about things that seem less disastrous to adults, such as divorce, separation from family, illness, crime, the violence of daily life, or death of a pet.

Children strive to understand things in terms of what they already know and as a result assign tangible characteristics where they are not necessarily present. For example, the word "radiation" is often interpreted concretely. Is it on the raindrops? Is it the dust particles shining in a ray of light?

Children require a sense of confidence that adults are in control and can provide them with safety and comfort. This critical underlying principle must direct our response to the issue of nuclear danger. The question, "Are we creating more problems than we are resolving?" is always an appropriate check on our input.

It is neither helpful nor appropriate for adults to bring up the "truth" of nuclear danger as we see it. It is our responsibility to provide constant reassurance, while acknowledging the "truth" as individual children perceive it. Children must be reassured of two basic points: 1) that many adults are working hard together to end the threat of nuclear disaster, and 2) that their lives are safe and they will continue to have their needs met.

Children don't always understand words like "peace", "arms", "power plants" and "nukes". We know that many young children interpret these words in their most literal sense; power plants as giant forms of vegetation, arms as body parts, etc. We cannot assume that even the word peace stands for something clear (...a "piece" of what?). In one class, after the teacher read several poems about peace and asked the children to share their thoughts on the subject, one seven year old asked, "...but what is peace, anyway?". Generally, children understand the word "war". Phrases like "waging peace" are newcomers. Our language reflects the "war-ism" of our culture. We tend to lack words which make peace a substantive entity and not just the absence of war. Some terminology, such as "strategic" arms, is misleading, ambiguous, and confusing to adults as well as children. See p. for explanations of some of the terminology of the arms race.

Like us, children suffer from feelings of isolation and need ways to feel more connected, empowered, in control, and hopeful. It is wonderful not to feel alone. Just hearing that other children have similar hopes and fears can help. We can help children build a sense of the strength and hope found in unity with others.

Try to exchange the results of your activities with another class in the school, in the city or town, or even some place far away. Two teachers we know from different schools each had their class write a group poem on the theme "Peace is..." after listening to a published poem with that title. Then their classes exchanged copies of their work.

It is through play that children experience and come to understand the world. Wars, battles, and other forms of conflict are a common theme throughout children's play -- in their dramatic play in the house corner, with materials like blocks and sand, in action drawings, and on the playground. The teacher has an important role in talking with children about their play in order to support them as they come to grips with the variety of issues involved and to ensure that nobody is getting hurt, overwhelmed, or over-powered physically or emotionally.

For children, the lines between fantasy and reality are not clear. We must help children articulate and reiterate what they usually know; that their play is different from real war because "nobody is really getting hurt or killed." Children also need help sorting out reality from fantasy as complex issues are presented in the media.

Children often view the world in terms of dichotomies and simplifications. (e.g., Good Guys versus Bad Guys, Us versus Them, Winners versus Losers, Bigger is Better, War is Glamorous). While we may accept some of these perceptions in young children as developmentally appropriate, we must help children to construct more sophisticated categories and complex understandings by encouraging them to respond to other people's ideas and feelings and to express their own. In the case of ideas and feelings about peace and war, development means moving toward the notion that "bad guys" are also human, that real people suffer when shooting and bombs exist, that everyone loses something when fighting and war occur, and that being bigger and more powerful does not necessarily mean that one is better.

Children lack a long-term future orientation. They are concerned about what may happen tomorrow. Although some children as young as four, when asked about their future, attach an "if" to their survival and refer to "the bomb",* this stands as a counterpoint to their idea that the present is everything. Also, in a child's view, the passage of time is neither necessarily continuous nor limited to one direction. For children, "time flying when you're having fun" and "going back in time" are experienced as very real occurrences. As a result, phrases implying finality, such as "the end of the world" or "everything will be dead," probably don't mean what they mean to adults.

Children's direct experience of social organization, styles of interaction, and expectations of adults is an important influence on their cognitive and social development. Although suggestions and activities in this manual are suitable for a special one-day focus, in the younger grades particularly, they are best viewed in the context of ongoing experience in a classroom atmosphere which supports peaceful values. As teachers we make many decisions in setting up our classrooms which may influence the attitudes and values of the children we teach.

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* Escalona, S.K., "Children and the Threat of Nuclear War", in M. Schwebel, Behavioral Science and Human Survival, Science and Behavior Books, Palo Alto, 1965.

How are conflicts between children resolved? Between teachers and children?

How does the relationship with the teacher help children develop inner controls independent of the constant presence of authority?

What discussion opportunities are there for solving problems as a group or dealing with sensitive or moral issues?

What is the balance between critical thinking and a right/wrong focus?

What is the balance between cooperative and competitive values in school games or achievements?

What opportunities are there for children to share responsibilities for projects none could do alone (like painting a mural, putting on a class play, or cleaning up the classroom)?

How is a multicultural perspective being developed, either through appreciation of diversity within the classroom or exploration beyond?

In what ways are we encouraging children to value the natural world of plants, animals, ecology, and health?

Are children developing a sense of success, competence, and trust in themselves as learners, thinkers, and decision-makers?

Many of the activities in the K-3 chapter focus on conflict-resolution skills and cooperative problem solving. Teachers have found that at this age it is not appropriate to teach directly information about nuclear war. If children can effectively handle and resolve conflicts, perhaps they will be prepared to create a future that uses means other than force to solve critical world problems.

STARTING POINTS

TALKING WITH CHILDREN ABOUT WAR AND PEACE

By paying close attention to the themes of war and peace in children's spontaneous play and work, we can be in a better position to understand how children are thinking, what their anxieties are. We are then in a better position to reassure and support them.

It is often awkward for teachers to give children a chance to express their thoughts and feelings about war. We can be uncomfortable watching children play war games, fantasize violence, explore their ability to win and lose fights. It is hard not to moralize: "It is bad to shoot people." "Wars are bad." Children may respond to such comments by saying the "right" thing or temporarily stopping their play, but they do not change their feelings. They should be allowed to play out their ideas in an acceptable atmosphere in order to understand and believe that peaceful alternatives are possible and preferable. This process takes a long time, but starting it is important.

Since children's play and drawings so often focus on war activities, there are many occasions during which you can initiate discussions on how conflicts arise. You can bring to their attention specific questions:

What are wars about?
Why did the fighting start?
Who is in them?
What happens in a real war? Who gets killed? Who gets hurt?
Who is left? How does it feel? What do you win and what do you lose?

It is easiest to raise these questions when small groups of children are engaged in an activity -- block-building, sand, painting, drawing, dramatic play. They may be building war camps, drawing battle pictures, dive-bombing sand castles, or pretending to be soldiers. They probably will not want to suffer a lengthy interruption, but you can raise a few questions then and take note of other questions to come back to later. In the case of war camps, for example, here are some possible questions to start children thinking a little more about what they are doing:

What are the forts for?
Whose fort is this?
Whose fort is that?
Why are they fighting?

Usually, one of the forts belongs to the "Bad Guys". One teacher said, "I might ask, 'Are they real bad guys or made up?' I wanted to find out if they are based on real people or movie stories because TV can influence children's perception. Usually bad guys are not based on real people and that makes it easier for the good guys to kill them."

Other questions can deal with ways of hurting people. Are they going to use weapons? What kinds of weapons? Children have mentioned guns, cannons, bombs, swords, planes, traps and knives. Why do people use guns, cannons, bombs? Children might respond, to win the war, to kill the other guys, to blow everything up. The implications of using weapons can be explored by asking about the end of the war.

How does the war end?
What stops it?
Who wins it?
How do you decide you've won?
Was it necessary?

Usually the answer is that the bad guys are all dead. If you ask whether any of the good guys get killed, they pause, especially if, as is sometimes the case, the script calls for only one person to be left as the winner. Children seem to start with the idea that winning is a wholly satisfactory goal, but there is often a strong underlying feeling about not wanting people to be hurt, and discomfort with the idea that winning requires hurting people.

Sometimes you may decide to extend a brief discussion at another time: "Remember yesterday you said there are real bad guys? Who are they? What makes them bad guys?" Or, "This morning when you were playing, I wondered how it would feel with everybody dead and you the winner?"

The questions that teachers direct to children often cause some disequilibrium as they try to resolve the unavoidable conflict they feel between their desire to play at war and adults' concerns about real war. Children should not be made to feel guilty about their enthusiasm for war play. One way to avoid this is to set firm standards about the responsibility of the players not to hurt anyone's feelings or body. Another is to acknowledge the children's awareness of the distinction between the fantasy of their play and the reality of adult war. With this help from teachers, children are quick to respond "It's just a pretend fight", or "This is not a winning war."

Annother good occasion to ask questions is when children are listening to a story. One teacher put it this way, after reading The Stranger by Kjell Ringi aloud,

"It was just wonderful. We were studying giants in the class so it didn't feel as if I was pushing things on the kids for my own purposes. It came up in a very nice, natural way. It made me think about the fact that for my age class (combined grades 2-3) bringing up these issues can be done very well through books."

Here is a transcript of the discussion that occurred following the reading of "The Stranger". Note that the book does not talk about war. It tells about how the people, in their fear of the giant-stranger, bring out their cannon against him; but when they finally get to talk to him, they like him a lot.

Teacher: Why didn't the bird (sent by the townspeople to the giant) return?

Students: The giant ate it.
It flew away.
It was scared of the giant.
The giant crushed it.

(after reading the book)

T: Why do you think the people wanted to fight the giant?

S: They were scared of him.
He was so big.
They thought he was an enemy.

T: Who do you think our enemies are?

S: Russians.
Germans.

T: (to child who is German) Are you our enemy?

S: No.

S: Japanese.

T: I have a friend who's Japanese and he's not my enemy.

S: Greeks.

T: Why do you say Greeks?

S: Well they fought us in a war. It's kind of embarassing to talk about now.

T: Are you talking about the Macabees and the Chanukah story?

S: Yes.

T: From over 1,000 years ago?

S: I guess it was a long time ago.
Cubans.
Africans.

T: (to child from South Africa) Are you our enemy?

S: No way!
I'm from Africa too and I'm not either.

T: It sounds like sometimes we think people are our enemy because of a past war or because the people appear different in looks or customs. Why do you think the townspeople think the giant is an enemy?

S: Maybe a long time ago some giants hurt the people.
Maybe because he looked different.

T: Was he really an enemy?

S: No.

T: What do you think is the message the author wants to convey?

S: War is really dumb.
There is no reason ever to have war.

T: Now why do you say that?

S: (long pause) Well, the people who kill each other might really be friends.

The discussion that followed the reading of The Stranger illustrates that children's thoughts and feelings evolve when they are helped to explore them. Teachers need to listen to all ideas, allow many forms of exploration, question for further clarification, and reassure the children to help them feel secure. Graphic details may be appropriate for older children, but are inappropriate at this age level. We agree with the Israeli child who wrote:

> If peace and war will ever meet
> the peace will always win
> for peace is like a blessing
> and war is like a sin.*
> -- Moshe Cohen

Through the exploration of all of our thoughts and feelings about peace and war those that are supportive of peace will emerge.

* Zim, Jacob, Ed., My Shalom My Peace, Paintings and Poems by Jewish and Arab Children, McGraw-Hill Book Co., New York, 1974, p. 85.

TALKING WITH CHILDREN ON FEARS ABOUT NUCLEAR WEAPONS

The last section dealt with teachers' conversations with children on the general theme of war and peace. We also need to be alert to children's specific concerns about nuclear weapons. Sometimes they refer to nuclear weapons by name, either with a question or a statement about what they think they know. Often, nuclear weapons are alluded to indirectly in their play, stories, or drawings. For example: "I've got a bomb that will blow up the world." "This war is never, never gonna end."

If and when we decide to pursue children's concerns about nuclear weapons, our first task is to find out what they understand or what they are really asking. Careful open-minded questioning before responding is important: "Do you think there really is such a thing? Do you think a war could end the world? Does that scare you?"

The following exchange took place with one six-year-old boy and his teacher while he was drawing a picture about the Revolutionary War.

Teacher: What is that?

Student: A bomber.

T: Does it have weapons?

S: Yes, bombs.

T: Any special kind?

S: Not those nuclear bombs.

T: Oh no? Why not?

S: Because they did that once before and they know what will happen.

T: Did what once before?

S: Dropped a nuclear bomb and the radiation spread over all the earth and even killed the rabbits in the forest.

T: But you don't think they'll ever do that again?

S: NO!

In this case, while the child showed that he had some impressions about nuclear bombs, the teacher's questioning indicated that she probably didn't need to provide further reassurance.

Another example of a spontaneous discussion of nuclear war took place in a second-third grade class while they were involved in a unit on Places. These children are putting together a word puzzle on the rug, and talking about place-related things. The teacher happened to hear:

Josh: There's gonna be a World War III. Mr. Mulligan says there's gonna be. And everyone and everything will be destroyed. Then the flowers will grow to be the size of trees after one night and the people will be humanoids.

Sam: No, that's not going to happen now because I met the peace marchers last night.

Teacher: (to Josh) Who is Mr. Mulligan?

Josh: He's a psychic. And the plants are going to grow real tall in one night.

Teacher: (to Sam) You feel that the peace marchers will keep this war from happening?

Sam: Yes, grownups are really trying hard for there to be peace.

Teacher: (to Josh) You spoke matter-of-factly about World War III. Does it scare you?

Josh: (pause) No. (shrug, returns to puzzle)

Teacher: (to Julie) Do you ever think about all this?

Julie: No.

Teacher: Does it worry you.

Julie: No.

Sophie: (walking by, panicky) There's going to be world War III? Are we all going to die?

Teacher: (calmly) No, Sophie. Josh was saying what a friend said.

Sophie: That's good cause I'm scared of dying. (walks on)

Teacher: turns attention back to three children doing puzzle (who are now talking about whether they should be able to hold more than one puzzle piece in their hands as they do the puzzle.)

This one anecdote reveals some of the different kinds of reactions, thoughts, and feelings children have. Josh may be relishing the idea of such a grand-scale disaster. The distortions in his details may indeed be what the psychic said, but may also be, at least partly, his own. He says, after a pause, that he is not scared of this possibility. Perhaps he realizes the extent to which what he described is really fantasy.

Sophie is scared. She seems to have picked up only on the frightening elements of World War III, and everybody dying, but none of the fantasy. Julie claims not to think or worry about a global disaster. Sam's reaction supports one of our strongly held views: *That adults' peace-making efforts are a source of reassurance for children.*

The teacher played an important role in this interchange although almost all of the substance was provided by Josh and Sam. First, she expressed interest in the conversation. She elicited feelings, checked in with Julie who was remaining silent, and reassured Sophie about her particular fear. It seems that this occasion to talk about their feelings is calming for each of the children: for Josh, who develops his frightful fantasy as he wishes with no ill effect; for Sophie, who gets to say she's afraid and is assured that nobody she trusts is saying there is going to be a war; for Sam, who has a chance to declare what it is that reassures him; and for Julie, who doesn't really want to think about it. All of them go calmly back to the business at hand.

In this example, Josh's initial scary statement was tempered by Sam's immediate response which set a tone of reassurance even without the teacher's comment. The talk could have proceeded quite differently if another child had been there instead of Sam. Occasionally, careful listening and questioning reveals the children's need for a direct or factual response. We want to offer only the information or type of reassurance that is really being requested without giving the impression that the subject is unspeakable or the questions wrong. Following are two different possible responses to a child who asks "What is radiation?" They are based on what a teacher might know about a child's understanding of the word "radiation".

S: What is radiation?

T: What do you think it is?

S: It makes the plants grow huge overnight.

T: That's not true. Maybe you heard that when there's lots of radiation plants don't grow properly. That is true.

S: What is radiation?

T: What do you think it is?

S: I saw pictures in a magazine. Yuch!

T: Pictures of what?

S: Real ugly bodies.

T: That scared you?

S: Yes.

T: It is upsetting to see that stuff. When people are exposed to an enormous amount of radiation, like from a nuclear bomb, they get hurt. Sometimes they don't grow properly. Sometimes they die. People hope the bomb will never be dropped again.

There are no easy or automatic answers. The preceeding examples are only ideas for responding to two of many possible fears about radiation. Often children are not asking for a clarification of the nuclear vocabulary in their questions, but rather an opportunity to express their feelings.

ACTIVITIES

The activities which follow suggest ways to find out what children know and think and feel about peace, war, and possibly, nuclear issues. They offer children a means to express themselves on this subject. Some allow children to see how others act in situations of conflict and, through the discussions that follow the activities, how they could act in similar situations. They offer experiences in cooperative problem-solving, an important means of resolving conflicts.

Teachers can prepare activities that come from books, poems, songs, pictures, films, newspapers and discussions. They can lead almost anywhere the children are ready to go. We present these ideas with the hope that you will adapt them for your individual classroom. Often one starter can be followed by another activity which uses a different medium. Even if you cannot obtain some of the books or poems mentioned, you may still find some useful ideas.

BOOKS

1. Where the Sidewalk Ends by Shel Silverstein
   N.Y.: Harper and Row, Publishers, Inc., 1974

In his book, Shel Silverstein offers delightful poems and drawings, many of which deal with concepts related to this Day of Dialogue. Children usually respond to these poems and we have selected some which can be used as starting activities. As with other starters, these can lead to further activities.

"Helping" (page 101): This poem begins with examples of children helping one another in the creation of an object and ends with an example of an object being broken. It deals with cooperative and destructive kinds of help.

You can talk to your class about:

-- what kind of helping they do.
-- what is helpful?
-- what is not helpful?
-- what ways have you worked together in the classroom?
-- how did you feel when you worked together?
-- why did you work together?

This discussion might lead to your reading Drummer Hoff, described in #2 below.

"Hug O'War" (page 19): A delightful poem that converts the aggressive game of Tug of War into a cooperative game of "Hug O' War" where the rules are simple and everyone has an enjoyable time. It encourages students to think about cooperative and competitive play.

Suitable for:

-- reading aloud and discussion
  -- what does winning and losing feel like and mean to you?
  -- how is it possible for everyone to win?
  -- what would this feel like?

-- creating new games
  -- Create new titles and poems for other games they know. (e.g., Tag you're it! or Bang, bang you're dead!)
  -- Change "Hug O' War" to "Tickle O' War."

-- creating rules for all the new games
  -- talk about new rules in groups and then offer them to the whole class.
  -- go outside or to the gym and try your new games out and have lots of fun.

The New Games and More New Games books offer many ideas and an approach to cooperative play which you might want to refer to.

"Where the Sidewalk Ends" (page 64): Each of us knows the need to go to a special, peaceful place at certain times. This more serious and quietly descriptive poem for older children tells of this place that can be found "where the sidewalk ends." This poem is a good lead in to thinking about what a peaceful world might be like.

This poem might lead to discussion about:

-- What kind of place is found "where the sidewalk ends"?
-- Do you have this kind of place? Describe it.
-- When do you go to this special place?
-- How does it make you feel when you're there?
-- Is it possible to have this place exist all the time or is it only for special times?
-- Is there any part of this place that you would like to have in your everyday life?

Children could draw pictures or write about their special place or the place described in this poem.

"The Generals" (page 150): We're all familiar with the technique of making excuses and this poem presents a consequence of this which we hope will never happen. In this poem, the enemies General Clay and General Gore would rather go to the beach and play than fight a war; however, they create obstacles -- the possibility of a closed beach, the chance of drowning, and a ripped bathing suit -- which prevent them from enjoying their day. It ends instead with their destruction. This poem allows children to discuss how people seek out familiar solutions rather than risk creating new ones.

This poem is suitable for:

-- reading aloud to the whole class.

-- pantomiming.
Divide the class into two groups, each taking the part of one of the generals. The teacher reads the poem aloud. The next time the groups can pantomime and read the poem themselves.

-- discussions of the excuses the Generals gave.
You can offer your class a chance to solve the Generals' problems so that they don't have to go on with this silly war. Stanzas 4-6 can be changed by giving alternate responses to the Generals' statements and questions, and thus changing the poem's ending. i.e., If General Gore is scared of waves, how could General Clay help him? General Clay could offer to teach him how to swim. The children should be given the opportunity to present solutions to all of the Generals' excuses.

-- discussions about the excuses the children use for things they do.

-- writing rhyming verses of their own about their solutions to the Generals' excuses and about the fun time the Generals had at the beach.

"I Won't Hatch" (page 127): A wonderful poem about a chick who refuses to hatch because he hears all about war and pollution and would rather remain inside where it is totally secure. It deals well with children's fears about the environment and their need to feel protected and cared for.

This poem easily lends itself to creative dramatics. Children will love working in groups of 3 or 4, or alone, taking turns, acting out the parts of the chick, the shell, a hen, and a rooster. The chick can read the poem. The hen and rooster and shell can try to convince the chick to hatch.

Before acting, a discussion can take place:

-- What is an egg shell like?
-- What lives inside an egg?
-- How does it feel to be inside?
-- What shape would you take inside an egg?
-- Does being inside the egg feel safe?
-- How would you go about breaking out of the shell?
-- How would you feel when you first came out?
-- How can the chick feel safe outside the egg?

You could also discuss why the chick should come out. What good things will the chick find in the world and how can the chick make the world better? This might be a good time to do an art collage: children look in magazines and cut out things in our world. After acting this out, the class can draw pictures of what the chick finds when it does come out of its shell.

2. Drummer Hoff adapted by Barbara Emberley
N.J.: Prentice-Hall, Inc., 1967

A simple verse with a wonderful rhythm and attractive rhyme, about the building of a cannon and its climactic firing. Colorfully garbed officers each bring parts to complete the machine. The repeating words make it great for reading aloud and then for children to act out.

This book deals with:

-- the creation of a weapon through the collaboration of many people.
-- who takes responsibility for a weapon's action and its effect.
-- if they can create such an intricate machine, could they possibly pool their resources to create a peaceful solution to the problem.

While reading this book these questions could be asked:

-- How do you think Drummer Hoff felt about firing it off?
-- What happened to the army officials after the firing?
-- Who benefited from the cannon?
-- What happened on the very last page?
-- How many times was the cannon used?
-- Why hasn't it been used again?
-- Who uses the cannon now?

After reading Drummer Hoff you might want to read aloud the poem "Helping" by Shel Silverstein where disruptive and cooperative kinds of helping are dealt with.

3. The Pig War by Betty Baker
N.Y.: Harper & Row, 1969

The year is 1859. Two groups, American and British, stake claim on an island (in what is now the state of Washington). Each attempts to outdo the other. Accidental damage to property occurs and British soldiers and American farmers start to throw potatoes at each other. The battle escalates as each side sends for help. When they realize that their own reinforcements are eating up their scarce food, the leaders of both groups talk and decide that they can share their island.

This I CAN READ history book can be read silently or read aloud to the whole class and then be followed by discussion. The story shows the process of working towards a solution involving compromise: deciding to share avoids conflict.

4. More New Games! and Playful Ideas from the New Games Foundation by Andrew Fluegelman; Tiburon, CA: The Headlands Press, Inc., 1981.

A wonderful resource book about a creative approach to play and recreation. It offers a delightful philosophy and shares practical methods for including everyone in the games, for inventing variations of old games, and for helping everyone feel that by enjoying themselves they really are winners. This book fosters a spirit of cooperative play.

5. The Hating Book by Charlotte Zolotow
N.Y.: Harper & Row, Publishers, Inc., 1969

The childhood problem of hating one's friend and being devastated by this feeling is gently presented and then resolved with all traces of hatred quickly disappearing, as can only happen in childhood feuds. A wonderful book for reading aloud to be followed by discussion allowing the children to tell of similar instances they've been involved in and how they felt.

While reading this book these questions could be asked:

-- If you were the girl's mother or friend, what advice would you give her?
-- What was the cause of the two friends hating each other?
-- What would have happened if the girl didn't go to her friend's house to ask her why she'd been so mean?

Class discussion could be about:

-- Have you ever "hate hate hated" anyone?
-- Why?
-- How did you feel?
-- How did you make up?
-- Could you have done anything to prevent the fight from happening?

-- Do grownups ever fight?
-- Why do they fight?
-- What happens when this occurs?

6. The Quarreling Book by Charlotte Zolotow
N.Y.: Harper & Row, 1963

Adults, then children, take out frustrations on each other, each picking on the next smaller person. Each is also influenced by the weather. When a playful dog makes the youngest smile again, forgiveness and friendliness are passed back up the line. Each person feels much better as the others become pleasant again, and as they themselves are kinder.

This simple tale with familiar and easily understood events deals with the general subject of generosity to others around you.

Suitable for:

-- reading aloud and discussion of events.
-- allowing children to tell their own experiences of being picked on, how it feels, how it feels when you can be kinder to others, how it feels when you can forgive.

7. My Shalom, My Peace Edited by Jacob Zim
N.Y.: McGraw-Hill -- Sabra Books, 1975

A moving collection of paintings and poems on the theme of peace, by Arab and Jewish children who have experienced war. The words produce sentiments that will deeply touch each child, and when shared by reading aloud will probably lead to fulfilling discussions and poems of their own.

You can use the format, first lines, or titles of many of the poems in this book as starters for children to write their own peace poems or stories. For example:

-- the format of "Sing the Songs of Peace" (page 84) Peace is...
-- the line of "A bit of Peace is needed..." (page 85)
-- the title of "The Peace Balloon" (page 75)
-- the line of "I Don't like Wars" (page 49) can be followed by "I like..."

8. Potatoes, Potatoes by Anita Lobel
USA/Bowmar/Noble Publishers, Inc., 1967

A right-to-the-point story about two countries at war, a mother's attempt to shield her two sons from it, their eventual involvement, its glorified and destructive powers, and the final resolution. The excellent drawings and clear narrative totally involve the reader in this tale which could be read aloud and then dramatized for the entire student body and parents.

This book deals with:

-- the glory of war.
What becomes of gleaming swords and shiny medals? What is meant by saying "The grass is always greener on the other side"? Is it a true statement? "Ladies threw flowers" as the soldiers passed by but how did they feel when their brothers and husbands came home from war?

-- shielding one's family from war.
Why did the mother build the wall around her home?
Do you think it was a good idea?
If the mother hadn't built the wall, what might have happened?

-- economics of war.
If people spend all their time fighting, building, and polishing weapons, who will have time to grow the food to sustain the people?

9. The Stranger: A Modern Fable by Kjell Ringi
N.Y.: Random House, Inc., 1968

This simple fable tells the story about how people, in their fear of a giant-stranger, bring out their cannon against him. When they finally get to talk to him, they like him a lot and he is invited to stay in their country.

It is suitable for reading aloud, puppetry, and discussion. (Refer to the discussion about The Stranger in the Starting Points section for types of questions used in a classroom after reading this story.)

Songs

The following songs all celebrate peace and unity.

1. "Strangest Dream," by Ed McCurdy.(In American Favorite Ballads, Joan Baez Songbook, Weavers' Songbook, and on Simon & Garfunkel's Wednesday Morning 3 AM, (c) 1950 (renewed 1978), Almanac Music Inc., New York, N.Y.)

2. "Let's Get Together," by Chet Power. (In Great Songs of the Sixties, (c) 1963, Irving, or on This is the Youngbloods, 1972, RCA Records, New York, N.Y.)

3. "Study War No More." (In Songs of Work and Protest, American Favorite Ballads, Song of the Spirit, Joyful Singing.)

4. "Vine and Fig Tree," (Traditional).

5. "Let There Be Peace on Earth," by Sy Miller and Jill Jackson.(In Songs of the Spirit, Best of Popular Songs: (c) 1955 authors, (c) 1956 and 1967, Jan-Lee Music, int'l copyright secured.)

Consider singing and studying these songs, and then organizing a Concert of Peace Songs for your school and parents. A sing-along sheet with the words of the songs illustrated by the students could be passed out to the audience so they could take part.

CREATIVE WRITING

1. The Big If is a United Nations film (1981) that offers a good poem or story starter for children who have the ability to transform objects. The phrase "What if?" allows us to fantasize about weapons becoming useful and needed objects in our society.

Beginning with the film's ideas:

"What if" tanks become tractors,
"What if" grenades become chickens,
"What if" uniforms became dresses, shoes.

Expand it to include other ideas:

"What if" arrows became pencils when they landed?
"What if" bombs became balloons? What message would you put inside of them?

Write a class "What if" poem.

Make a list of all the weapons the class knows about and then talk about the useful things they could become.

Write stories using lines from the "What if" poem. "What if" during a war these changes really occurred? How would your enemies react? What would they do with these useful things? Why might these changes have occurred?

2. Have children write five rules for a good world to live in. Put the rules into a story context. (You might be a Congressperson working on a world constitution.) Have a discussion with the class about your rules.

3. After a class discussion about war, peace, or my perfect world, children might write acrostic poems, either individually or in small groups.

P is for...
E is for...
A is for...
C is for...
E is for...

Other words such as WAR or MY WORLD could also be used.

STORYTELLING

In the following storytelling activity, a tale begun by the teacher is continued or completed by the children. The teacher carefully unfolds the story up to a point of dramatic tension at which a crucial decision must be made, and then the children create possible "next events" or endings. This gives the children the chance to draw on fantasy elements from their imaginations -- as well as on factual information they possess -- to express their ideas around the dramatic conflicts structured for them. This often gives the teacher an indirect way to assess where the children are "at" in their thinking around conflict issues and moral dilemmas.

Storytelling is itself an art, and most elementary teachers are practiced at it. It is the teacher's job to cast the storyteller's spell: to set the mood and conjure up vivid characters, to lay down the plot step by step and define the dramatic conflict to be addressed. It's nice if characters can be drawn from experiences the class has shared -- a beloved animal character from a book previously read together; a sympathetic figure from a story written by a student; or the TV or movie hero(ine) who currently captures the group's imagination, be it E.T. or Pac-Man or a George Lucas superhero. In the story "The Arms Race" printed below, for example, "Friend One" and "Friend Two" could effectively be replaced with names of familiar characters the children identify with.

The situation in which the characters find themselves can reflect issues of ongoing concern in the classroom -- the problem of pencil theft, for example -- or more global issues of social conflict or war, as depicted in "The Arms Race" below. It is important that the open-ended situations posed be specific enough for the children to focus on in some depth and imaginative detail as they make their contributions to the story. Sometimes a setting such as "a planet in a galaxy far, far away" or an imaginary kingdom or a desert island can provide the exotic distance necessary for it to be safe for the children to project fearful fantasies into the story they create.

Storytelling is by definition an oral, group activity in which the group imagination is caught up in the unfolding fantasy. Children can take turns adding to the story, either by embellishing and providing detail to what has gone before or by introducing new elements. The teacher should maintain an active, ongoing role in directing the development of the story by the use of

well-placed, appropriate questions: What happened next? Why do you think X. did that? What other choice could Y. have made? How did Z. feel when that happened? Because young children aren't able to provide this structure for themselves, the teacher must help them by focusing their attention on specific, vivid details of plot, character and message.

Finally, the teacher might wish to make a tape recording as the story is presented and the children share their contributions and arrive at one or more endings. The story could then be written out and edited for use in a number of follow-up activities: copies might be made to be read individually or discussed in another group session; children could work alone or in groups to illustrate the story and make it into a picture book to share with other classes; a copy might be presented to the school library; or the story might be acted out and presented before parents and other members of the school community.

There is, of course, an infinite variety of stories to use for an infinite variety of purposes. The following adaptation of a story by Edna St. Vincent Millay was created by members of the Chicago chapter of ESR for use with elementary school children around the subject of the arms race. It is offered here for your use "as is", or simply as one example of the kind of story you might wish to create.

THE ARMS RACE

Once upon a time there lived two friends who loved to build with the colored rocks both had collected for many, many years. They had them in all sizes and shapes -- red, green, oval, round, purple, yellow, large and small. They built castles and bridges, skyscrapers and boats. These two could play for hours together and never get tired.

One day Friend One said, "I know! Let's build a wall between us. You cannot come on my side unless I say so. And I cannot come on your side unless you say so."

Friend Two agreed...although she wondered what they would do after they built the wall.

Slowly the wall went up as a friend on each side put up one rock after another. The last ones on top were the hardest to get up. They had to stand on tip-toe and push with all their might. When they finished, they sat down wearily on the ground.

"Phew, that was hard work," said Friend Two. "I think I'll climb over and take a rest with you."

"No, you are not playing this game right!" shouted Friend One. "You can only come over if I ask you over."

"Oh..." Friend Two looked around for something to do. She noticed a small pile of rocks left over from their wall. So she sat down next to them and began building a house.

After awhile, Friend One heard her friend humming and the sound of rocks clicking together. She looked around for some rocks to play with herself, but all the stones had been left on her friend's side of the wall.

"Can I come over and build with you?" asked Friend One in a kind voice, hoping her friend would be generous.

"No, I haven't very many, and besides I did not ask you to come over," she replied.

Friend One put her face in her hands. Her mouth was bent in a frown. "I do not much like this game anymore," she thought to herself. "I will ask my friend to give it up."

But when she told her idea to Friend Two, she was not interested.

"I like this game. I can do exactly what I want," she replied. "Go find some new rocks to play with."

Friend Two's response made Friend One so mad that she stomped off in search of her own rocks -- on her own side, of course. But when she found a big, heavy rock, she carried it back to the wall and threw it over.

"Hey, you almost hit me!" cried Friend Two.

"Good. That is what you get for not sharing your pile with me. Besides, those were once my rocks, too."

"Well, they are not yours any more." And having said that, Friend Two knocked her house down and began setting up the rocks in a tall pile next to the wall. "I have a lot more rocks than you do," she said in a threatening voice, "and if you have it in mind to throw over another stone, I will throw all thirty of mine back at you."

"Please, let's stop this game," pleaded Friend One. But she was only pretending to be sorry. She really wanted to collect forty rocks for herself without her friend knowing it. "That way," she thought, "I will be stronger than she is. Then she will be afraid of me."

Friend Two could hear her friend pacing around on the other side of the wall. As she drew closer, she discovered a small crack in the wall which she could spy through. When she looked, she saw her friend collecting rocks and piling them up next to the wall just as she had done. So Friend Two began collecting more rocks, too.

The two piled up more and more rocks next to their side of the wall, but no matter how many they each collected, they never felt they had quite enough to scare the other. So they went on piling up more and more rocks next to the wall.

Also, they no longer thought of each other as friends. They were enemies now.

Because they gathered up so many rocks, the ground around them was scarred with many holes. Sweat dripped from their foreheads and their muscles became very tired and sore.

"Playing with rocks is not a fun game at all anymore," mumbled Friend Two as she dragged her one hundredth rock to the wall. She was so hot and tired, she decided to lean against the cool stones of the wall to have a brief rest.

Suddenly a rock under her shoulder slipped out of its place and crashed down on the other side of the wall. Her enemy, who had been resting too, jumped up and screamed, "So, you are ready to fight, are you?"

"No, no! It was a mistake. I did not throw that rock. Let's stop this whole affair!" she cried.

But her voice was drowned in a wave of stones falling over the wall. With regret she too began throwing her rocks in reply. But as she threw, she stepped away from the wall until she was so far, her rocks could hardly reach over the wall.

Finally, she made up her mind to run away. She would throw one last rock at the wall and then dash away over the hill.

She aimed at the space where the first rock had slipped out. She could see her enemy all red in the face like the sun setting behind her. She hoped her rock would make the wall tumble.

Just as she lifted the rock behind her shoulder...

ART

The following activities provide opportunities for children's visual expression of their feelings, wishes and ideas about peace and war:

1. Draw a mural or assemble a collage on the theme: "What is important or of value to me in the world, or in my life." (Refer to the poem "I Won't Hatch" by Shel Silverstein in Where the Sidewalk Ends.) Cut pictures or parts of pictures from magazines to show what is valuable to you in your world. Add details as needed with markers, crayons, etc. Discuss before, during and/or after making the collage how these things make the world special and what would be missing in our world if these things were not in it. You may want to remind the class of both natural things and things made by people which are of value.

2. Draw, paint, or make a collage on the theme of "What is a very scary thing which you have heard about or which has frightened you at some time," or "What do you think a war is like?" These activities may call for discussion and reassurance by you that adults are concerned about wars and are working to find ways to prevent them. You also may readily find out, through visual media, what children are thinking and feeling and what they know,thereby laying the groundwork for what you may want to do next.

3. Draw or paint your own idea of a perfect place to live, or what the most peaceful world would be like.

4. Design a peace poster which you would like to see put up in schools for children and their parents and teachers to see. What designs should it have? What simple messages? Should it be in several languages? What symbols (explain at their level) would everyone in the world understand?

5. Design a flag with peace symbols.
   -- Discuss and show peace (and other) symbols.
   -- Discuss use of flags, where they are shown, when and by whom.
   -- Make up your own peace symbols, to add to usual dove and olive branch.
   -- Have a parade with peace flags; or mount them around room or in school hallway or auditorium.

6. Draw what you think the future will be. Draw a circle to represent a crystal ball. What do you see in the world's future?

BOOKS FOR CHILDREN: GRADES K-3

Baker, Betty. The Pig War. Harper & Row, 1969. An I CAN READ history book about the rivalry between two groups, each of whom thinks an island belongs to them.

Breton, Beverly. A Gun is Not a Toy. Stop and Grow Book Nook, 1975. A boy decides to stop playing with his toy guns at the suggestion of a police officer who says emphatically that "Guns are not toys."

Coerr, Eleanor. Sadako and the Thousand Paper Cranes. Dell Yearling Book, 1977. A fictionalized account based on a true story about an 11-year-old Japanese girl who, in 1954, is found to have leukemia resulting from radiation exposure nine years before.

Emberly, Barbara. Drummer Hoff. Prentice-Hall, Inc., 1967. A simple attractive verse with colorful pictures about the building of a cannon.

Fitzhugh, Louise and Sandra Scoppetone. Bang Bang, You're Dead. Harper, 1969. An anti-war lesson in words and pictures tracing the increasingly violent actions of some children who began a game of playing at war.

Leaf, Monro. The Story of Ferdinand. Illustrated by Robert Lawson. Viking Press, 1938. Classic story of the bull who didn't want to fight.

Lobel, Anita. Potatoes, Potatoes. Bowmar/Noble Publishers, Inc., 1967. A story about a mother's attempt to shield her two sons from war, their eventual involvement in it, and the final resolution of the war.

Miles, Betty. Save the Earth! An Ecology Handbook for Kids. Knopf, 1974. Why the Earth should be kept healthy; lots of project ideas.

Rinji, Kjell. The Stranger. Random House, Inc., 1968. A fable that tells the story of people who in fear bring out their cannon against a giant-stranger but when they finally get to know him, he is invited to stay in their country.

Sendak, Maurice. Where the Wild Things Are. Harper & Row, Inc., 1963. (For annotation, see Bibliography Grades 4-6.)

Silverstein, Shel. Where the Sidewalk Ends. Harper & Row, Inc., 1974. (For annotation, see Bibliography, Grades 4-6.)

Summers, Stanford. Wacky and his Fuddlejig. Revised. Fuddlejigs, Box 837, Times Square, New York, NY 10036. A story about a worker in a toy factory who quits rather than continue to produce military toys. He then puts his creative energies to use making a new toy, the fuddlejig.

Udry, Janice May. Let's be Enemies. Illustrated by Maurice Sendak. Scholastic Books (originally Harper & Row hardback), 1961. About two little boys. The theme: power struggle. A delightful, humorous treatment depicting real child problems which reflect similar adult ones.

Zim, Jacob, Ed. My Shalom, My Peace. McGraw-Hill, Sabra Books, 1975. (For annotation, see Bibliography Grades 4-6.)

Zarambouka, Sofia. Irene. Tee Loftin Publishers, Washington, D.C. Available from Educators for Social Responsibility, 23 Garden Street, Cambridge MA 02138. A beautifully illustrated fable about peace including a play for young children to perform with sketches for simple scenery and costumes, tunes, and lyrics.

Zolotow, Charlotte. The Hating Book. Harper & Row, Publishers, Inc., 1969. The childhood problem of hating one's friend and being devastated by this feeling is presented in this book.

Zolotow, Charlotte. The Quarreling Book. Harper & Row, Publishers, Inc., 1963. A story about people taking out frustrations on each other by picking on the next smaller person.

THE 4-6 CLASSROOM

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DEVELOPMENTAL CONSIDERATIONS

(Since there is a good deal of developmental disparity among children in this age range, we suggest that those who work with fourth graders also look at the guide for kindergarten through third grades, and those who work with sixth graders also look at the developmental factors for junior high.)

As teachers, we are uneasy about initiating discussions on any topic which we feel could get beyond our control, frighten children rather than inform them, or raise levels of tension rather than lower them. Every adult who deals responsibly with children shares these concerns. We may also be uncomfortable about introducing topics that parents might not want discussed at school or believe are inappropriate for children.

We don't want to frighten children, nor do we want to overload them with information or introduce subjects for which they are not ready. Many children seem to be unaware of the arms race and its implications for their lives. Some are undoubtedly secretly fearful but, for one reason or another, cannot express their fear in direct or useful ways to each other or to the adults around them. Others do express fear in a variety of ways, some of which help alleviate terror, some counterproductive.

Even though children's reactions to frightening issues take different forms and are experienced with different levels of intensity according to the nature of the particular child, there are some characteristics which, although common to people of all ages, could be said to be more vividly present in children of these later elementary school years. We want to consider here their implications for classroom discussions of the arms race and related issues.

We hope, by our suggestions, to help you offer children opportunities to ask questions, express feelings, and take actions appropriate to their ages and situations; in other words, recognize children's fears where and how they exist and support them in dealing with those fears.

Children from 9 to 12 are often extremely interested in facts. They are collectors of facts, always eager to add to their store. The informal activities we suggest are meant to help these children deal with their anxiety in their own way: by learning and quoting "the facts". Some children may ask direct information questions.

S: What happens to people when a nuclear bomb explodes near them?

T: Lots of things happen. It depends on what kind of bomb and how close they are. Would you like to find out some details?

-or-

T: People are badly burned, and some of them die right away. Others die later from burns and from sicknesses they get from radiation. That's why lots of people want to be sure no one ever explodes a bomb again.

If you have a couple of good reference books on hand, those who are interested will be able to look up information for themselves.

We assume that teachers will focus in class discussions on asking children questions and listening closely so as to hear their concerns. For specific examples of such dialogue, we refer you to the K-3 section. Because of the changing needs of the nine through twelve year olds, however, it is important that we be ready to introduce facts into the discussions as well, in order to meet their growing desire for information about issues. This does not mean that listening is no longer appropriate, but that information will be demanded of us, either directly or indirectly.

Fourth through sixth graders are also likely to be rigidly justice-oriented (although their principles can break down when strong personal interest is at stake). Their "fair-mindedness" may manifest itself in a number of ways, a common one being a sense of outrage that the grownups could do this to their futures. "It isn't fair!" Along with the sense of justice comes a kind of literal-mindedness. For these children, it's convincing to count weapons in order to see who's ahead in the arms race and the more subtle distinctions of strategy and deployment are of less interest. They believe that more is better -- and safer.

Faced with these attitudes, you can ask further questions about the arms race: from our viewpoint, from the Russians', from that of the other NATO countries. You can take advantage of children's newly acquired ability to take others' points of view. You can also emphasize the efforts of many adults to be fair to them, the children of the world.

S: It's just not fair that other people made the world like this and we have to live in it.

T: We agree. Lots of grownups all over the world are trying to find ways to make the world better and get rid of things like bombs. Maybe you could help by writing letters.

-or-

T: Let's find some ways, then, of letting people know how you feel.

At this age, children are often attracted to sensationalism. They show intense interest in drama of the blood-and-guts variety which they may impose on their classmates in less than helpful ways.

> "My brother told me that your eyeballs melt if you look at a nuclear flash."

We need to think about ways of dealing honestly with this sort of statement (which can cause nightmares for other children). Most of all, it's necessary not to lie to children nor try to gloss over their comments since, even if such comments are difficult to cope with, they are one way children seek reassurance and understanding from adults.

S: I heard it takes only ten minutes to crisp a whole city.

T: I'm not sure. I think it depends on where the bomb detonates. Do you want to find out more about it?

-or-

T: That depends partly on how powerful the bomb is. It's true, there's a lot of destruction in a very short time. That's one reason people are so concerned.

Along with sensationalism, children may show an apparent love of violence and conflict: a strong interest in fights, danger, divorce, war, guns, explosions, violent death. It's hard to have a clear sense of how to react to children's spontaneous discussions, drawings, re-enactments of scenes of violence, particularly since violence is so prevalent in our adult culture. Again, we refer to the K-3 section for some examples and guidelines.

Thinking and talking about a peaceable classroom, a peaceable world, a positive future and how to help bring it about may, in the long run, have equal appeal for at least some of the class, especially if the ideas are presented with some imagination.

Some children deal with anxiety through humor, however clumsy:

Q: What did the music store say to the instrument?

A: No ukes allowed. (Get it? Ukeleles...)

Although sometimes annoying for teachers, humor provides relief from tension, a non-threatening way of talking about scary subjects.

Another way children protect themselves from fear is by creating reassuring fantasies. Escapism is a common coping strategy for adults as well. Children who are especially prone to fantasy can be guided toward expressive activities -- writing stories or poems, drawing or painting pictures. It may be difficult for you if children express their fantasies to the whole class in terms of solutions.

S: My daddy and mommy say that all we have to do is go downstairs in the cellar and we have enough food for a month.

T: Some people think bomb shelters will help, and some don't. It seems to make you feel safe.

-or-

T: Civil defense plans make some people feel safe, too, but a lot of people feel the best way to be really safe is to make sure bombs don't drop at all.

Again, it's important to think through how to handle this sort of statement without destroying its function for the child who expresses it. The child may have doubts about its efficacy even as he or she asserts it; questioning it may remove a much-needed support.

The most difficult kind of reaction is that of frozen denial: the child who, when the subject of the arms race comes up, sits with a closed, frightened face. How can a teacher deal with such a child? Not, surely, by forcing knowledge upon him or her. After making a sensitive assessment of the situation (is the child overwhelmed by the discussion? preoccupied with other issues? unconcerned? new to the issues?), you may be able to determine an appropriate response.

Children from 9 to 11 or 12 need adult support, protection and communication. Some are afraid that the adults they know will abandon them emotionally. They need to know that adults care and are working with and for them to help ensure their futures; that adults share their concerns; that these anxieties are real:

"Yes, many adults are concerned. That's why we're trying to find ways to change things. If enough of us get together, we will."

You may find it helpful to talk with our colleagues so you can clarify your own feelings and thoughts. You will almost undoubtedly recognize in them some echoes of the children's feelings. In thinking, feeling and acting, we all need support and a sympathetic community.

The activities in the 4-6 chapter highlight lessons in resolving conflict peacefully and exploring how children think and feel about fearful situations. Some children may be ready to clarify facts about nuclear weapons and activities are included for that purpose. The priorities at this point should resolve around problem-solving activities that encourage children to use skills of negotiation and conflict resolution in order to learn alternatives to force.

We want to avoid putting the child in a bind between parents' values and ours. Fourth through sixth graders may have trouble handling what they perceive to be a conflict. Therefore, it is essential to support their parents' positions, making all viewpoints legitimate and to encourage an understanding that people show their concerns about the future in a variety of ways.

STARTING POINTS

The following suggestions will give you a variety of ways to start talking with your students about the issues of world peace and nuclear disarmament. One of the major goals of the Day of Dialogue is *finding out what students feel and know about nuclear weapons and the threat of nuclear war so that we can appropriately meet their needs for support and information.* However you approach these issues in your classroom, remember to listen carefully to your children's ideas and expressions of their feelings.

Since discussion is central to the introduction of these issues, we'd like to suggest to you some discussion guidelines we have found helpful:

1. Children should feel free to share any idea that comes to mind. They should also feel free NOT to share a private thought or feeling. You can help your children feel comfortable by accepting any comment without judgement. These comments can be written on the board as they are made, so everyone can read or write them.

2. Having your children sit in a circle makes it easier for them to talk to each other and to you.

3. Although you should be honest in expressing feelings, it is important not to burden the children with our own fears. Your participation in this day of dialogue will show them that adults are working hard to resolve the problems raised by the nuclear arms race. We must reassure our children that conflicts, whether personal or global, can be resolved without violence.

4. It's useful to have children summarize and repeat the gist of what has just been said. This is one way to assure attention to one another's feelings and ideas. All of the children need to be encouraged to listen to one another and to respect differences of opinion.

Your students will respond to this kind of discussion in diverse ways, including fearfulness. The Developmental Section includes helpful ideas on how to deal with many of these responses. A period of silence after a difficult discussion may help students settle their feelings. It is important to give children an opportunity to talk about their experiences through activities such as those suggested in the next section, Activities.

We offer a variety of starting points here for your selection. Only you can judge which will be appropriate for your students. Please let us know what works for you and your class!

ACTIVITIES

BRAINSTORMING/WEB CHART

"Brainstorming" is an effective way of gathering children's spontaneous ideas and impressions about almost any subject. Responses are usually written on the blackboard or on a large piece of paper for all to see. A "Web Chart" places the words or phrases elicited by a brainstorm in a connected form.

We suggest that you start with "CONFLICT" as the subject of your brainstorm/web chart, although "PEACE" or "WAR" or "WEAPONS" could also be used. Write the word in the center of the board (or paper) and circle it. Ask the class what it means to them -- what associations, experiences, or feelings it evokes. Each time something is suggested, draw a solid line from the main circle and add the word or phrase.

As students begin suggesting ideas related to those previously written on the board, link them to the appropriate previous contribution rather than to the main circle.

Continue "webbing" as long as interest is high.

Discussion: How could we define conflict?

What elements do all conflicts seem to have in common?

What causes conflict?

What makes it worse? What cools it off?

A completed web chart might look something like this:

MONSTERS

Some fourth, fifth, and sixth graders have been frightened by specific episodes in films. Some have seen lots and lots of horror films on television. If you feel comfortable with it, you might ask your students to talk about scary things on TV and to describe the monsters they're freaked out by. You might ask:

-- What are the characteristics of those monsters?
-- What are their powers?
-- What is scary about them?
-- Can monsters really destroy the entire Earth?
-- Which monsters threatened to do so?
-- Were the monsters able to?
-- Did people try to understand them?
-- How was the destruction of the world prevented?

Discussions of such themes may elicit specific reference to stories of bombs, of war, of holocaust, of problems with ecological balance such as using up the ozone layer. It would be helpful to find some ways of talking about how people in movies, on TV, and in real life are able to take action to prevent their worlds from being destroyed.

Often there are steps to the process, especially in the TV movie plots. First, the monster is created -- usually through accident. Second, its power is used against people -- usually quite inadvertently on the monster's part. Third, someone points out that there's some monster with power loose, and no one believes him until a lot of people are killed. Fourth, they call in the army to handle the problem with force -- but the weapons don't work. Fifth, they have to find some other way to deal with the monster. Sixth, the monster is generally stopped by some equal force and then laid to rest in some fashion. Usually the film ends with people vowing not to mess around with nature or the powers of the cell or something else.

You can use steps like these to discuss fears that arise from environmental, nuclear or adolescent issues. In this way children can feel more in control of their lives in relation to these issues. Questions that may draw out this discussion are: "In these pretend movies, how do people deal with forces that seem to be unstoppable? Do their ways seem reasonable? What other ways are there?"

Another possibility is to have a discussion about the film character E.T. and talk about children's fantasies about being powerful. You might explore the difference in the way adults and children reacted to encountering a being from another world.

STORIES

One characteristic of the fifth and sixth grader is a new capacity for nostalgia. You can perhaps take advantage of enjoying looking back on earlier beliefs and fears about life by reading some "little kid" stories about fears, and asking them to compare things they used to be afraid of with things they are afraid of now.

1. Read Where the Wild Things Are to notice the way Sendak shows monsters in dreams as scary. You might ask:

-- Did it scare you when you were little?
-- What's scary about the book?
-- What's good and comforting about the ending?
-- What would you say to a smaller child who was afraid of the story?
-- What are some of the things you are afraid of now?
-- What do you say to yourself to reassure yourself?
-- What could you say to another kid who was afraid of those things too?

2. Read Let's Be Enemies to look at the way the book shows a contrast between being enemies and friends. Talk with your students about these questions:

-- What do little kids think an enemy is?
-- What was an enemy for you when you were little?
-- What were the rules of being enemies then?
-- Who are your enemies now?
-- What are the rules of being enemies now?
-- You might try to talk a little about the connectedness of enemies -- that to be enemies follows rules which are often elaborate, and often very much like friendship.
-- How might one convert enemies to friends?
-- How come countries that used to be our enemies in the olden days are now our friends (e.g., England in the Revolutionary War, Japan in World War II)?

Help your students contrast their current fears with their past fears. Suggest they draw or write about their fears. Perhaps they could produce a book of scary things for smaller kids, and help them to see ways to overcome those fears. Perhaps they want to ask grownups how to reassure themselves about some of their fears.

You, as teacher, might want to think about ways you reassure yourself about your own fears. There are some useful coping mechanisms which you could perhaps identify for your students -- denial, avoidance, magical thinking, learning all you can about a subject, getting involved in some kind of action (if you think a monster lives under the bed, install a fluorescent light...).

NEGOTIATING

1. Write "negotiate" on the board and have the class read it aloud if they can. Ask if anyone knows what it means.

2. Explain that negotiating is a way of solving problems between people so that everyone can win. Then list the following steps on the board:

   1. Say what you think the problem is.

   2. Say what you want.

   3. Say what the limits are.

   4. Work out an agreement.

   5. Is everyone happy?

3. Walk the children through the steps with the following situation: Kevin keeps calling David "Fatso" and other names; David breaks Kevin's pencils and crayons.

4. Give students situations from different content areas to use for practice in negotiation. Math and Social Studies are particularly good sources of situations.

5. Discuss:

   -- In what kinds of situations might you want to negotiate?

   -- How would you ask the other person to negotiate?

   -- What if they won't do it?

   -- What problems can you see arising during negotiation?

COOPERATIVE GAMES

These are just a few of the many cooperative games that have been designed to help children experience the fun of playing together, rather than against one another. (See the Bibliography for suggested cooperative game books.) They might spark a valuable discussion about the feelings engendered in cooperation vs. competition.

1. Two partners face each other, place the palms of their hands together, and take a step or two backward so they are leaning on each other to maintain balance. Then, in unison, they try to push each other back into balance without moving their feet.

2. Two partners sit back to back, with bent knees and linked arms. Leaning on one another, they try to stand up.

3. Two partners stand facing one another, palms touching, about three feet apart. They take turns falling toward each other and being supported by their partner's palms.

4. Partners stand facing one another and stretch their arms straight out in front until palms are touching. Both partners then close their eyes, drop hands, and turn around in place three times. Keeping eyes closed, they then try to reconnect by touching the palm of either one of both hands.

5. Several children make a tight circle, standing or kneeling shoulder-to-shoulder. One person stands in the middle with body stiff and falls in any direction. People in the circle catch and push him or her upright.

6. Make a tight, shoulder-to-shoulder circle with as many children as are present. Everyone turns in the same direction. At a signal from you, everyone tries to sit on the lap of the person behind. Great hilarity!

7. Children lie down in a circle with heads on one another's tummies and try not to laugh!

8. A large group of children measure the length of time they can keep a large ball or balloon(s) in the air. This can be done outside or even sitting in rows or groups of desks.

9. Several children stand in a circle, place their hands in the center, and take hold of the hands of two people other than those immediately next to them. Then the group works together in an attempt to untie the knot without releasing handholds.

10. Have children make a human sculpture. Start with one person taking a position. Others, one at a time, join the sculpture by touching one part of themselves to a person already part of the whole.

11. Children could make a human machine similarly. Each person chooses a simple, repetitive motion as well as a position -- taking care to "fit" into the whole.

OTHERS IN BRIEF

1. Ask your students what they know or have heard about conflicts around the world and/or the nuclear arms race.

2. Bring in a current newspaper article about the fighting going on in some part of the world (even a local conflict) and share it with your students. Elicit their ideas as to how to resolve the problem.

3. Read Sadako and the Thousand Paper Cranes.

4. Watch the short film "Neighbors," produced by the Canadian Film Board and often available in public libraries.

5. Present a hypothetical conflict which might take place in your classroom. Brainstorm with your students possible ways to resolve that conflict. Discuss the advantages and disadvantages of each solution suggested.

6. Write this statement on the blackboard: "The difference between nuclear and unclear thinking depends on how you use the U.N." Ask children what they think the statement means. Do they agree?

7. Have children draw pictures of "The Future," How will their world look in the year 2000? Share the drawings and discuss them. If some children draw pictures of war or devastation, discuss ways to avert such disasters. If not, ask your students how they might ensure the positive view they have.

8. Design a "test" on any subject and give it to your children twice. The first time, award a prize for the best score. The second time encourage the children to help one another and award prizes to everyone (e.g. a sticker, 10 minutes extra recess) if the class average improves or reaches a set amount. Discuss the results.

9. Have students collect pictures of weapons. Discuss how each is used, which are most scary, why would someone use these weapons, and how conflicts might be resolved without weapons. Are there invisible weapons?

10. Introduce and discuss the possibility of solving a problem where both parties "win." Give a sample conflict situation and use this chart to explore different kinds of resolutions:

	A gets what she wants	A doesn't get what she wants
B gets what he wants	WIN-WIN	WIN-LOSE
B doesn't get what he wants	WIN-LOSE	LOSE-LOSE

Three examples might be:

1. John calls Joe "Dumb". Joe grabs John's books and throws them on the floor.

2. One homeroom in a school feels that they want to have the school rules changed so that they can chew gum in school. The Principal says that no one has been allowed to chew gum in school in the past and does not want to change the rule.

3. Country A owns a small island off the coast of Country B, many miles away from Country A. The government and the people of Country B are upset, and they believe that it should belong to them.

FOLLOW-UP ACTIVITIES

It is extremely important for children to have a chance to participate in activities that allow them to process the possibly disturbing feelings generated during a discussion of these issues. The follow-up activities we suggest here have been grouped according to their focus: INFORMATION, EXPRESSION, or ACTION. We've categorized these activities for your convenience, but they are complex, so that many of them actually fit into more than one group.

You may want to offer your students a choice of activities to meet the differing needs of individual children in your class (see section on Developmental Considerations), or you could all work on a project together.

Some of the activities suggested can be completed on the Day of Dialogue itself. Others could take much longer -- especially those involving research or political action. Some might be assigned as homework, which could be an excellent way to involve parents. Our ideas are the result of our own experiences with our students -- please share YOUR ideas with US!! We are all involved in the process of discovering how best to talk with our students, colleagues, and communities about these very sensitive issues: we need to work together and support one another in this process.

ACTIVITIES FOR INFORMATION

In order to find out more information, many children will want to go to factual books on the subject. Some may prefer to find films, television documentaries, or use newspaper and magazine articles for their information. In any case, the suggested activities are for those children who are interested in finding out all kinds of facts, and who need to focus their learning on some kind of data collection.

1. Find out when the first atomic bomb was used. Who used it? Where? Why? What good came from its use? What bad came from its use?

2. Create a timeline that describes key events in the arms race. Draw bombs of appropriate size to represent new developments in the technology.

3. Create a world map showing countries that have nuclear capabilities and those that do not. Put up markers of varying sizes to indicate the number of weapons these countries have. Are there patterns in the locations of the nuclear nations?

4. Find out what organizations in your area are working on disarmament issues. Ask for their help in understanding what can be and is being done NOW. Perhaps they can provide a speaker or film for your school or community. Ask how YOU can help THEM!

5. Write to embassies or consulates of other countries asking for information and literature on the problems they are facing and how they are being dealt with. Find out where the countries are and more about the people who live there -- beliefs, life-styles, needs, etc.

6. Have students correspond with children in a school in another country. This is an opportunity for sponsoring a Soviet-American exchange. For further information, contact:

   International Friendship League
   22 Batterymarch Street
   Boston MA 02109
   (617) 523-4273

7. Compile a booklet of facts about the arms race. There are many places to write for this information. Your congresspersons ought to be particularly responsive. You could write to the Department of Defense, the Civil Defense group in your area, the U.N. Commission on Disarmament, as well as many of the groups which are sponsoring the Freeze and sponsoring information exchange.

8. A useful math activity involving graphing and figuring percents could be developed from looking in newspapers for a week and counting or clipping all items related to the arms race. Compare a week's worth of articles in June, and a week's worth in February.

9. Sixth graders often need to learn to use the Reader's Guide to Periodic Literature. For those who are interested in the arms race, a good way to practice is to research some aspect of the arms race in five or six major magazines over the past year.

10. Use dictionary, newspapers or magazines for any words or concepts you want to know more about. You might create a vocabulary list or spelling list of words connected with the arms race.

11. Newspaper clippings collected might be put into a scrapbook (with space for comments) or displayed on a bulletin board or collage or poster.

12. Some children may want to find out how an atomic bomb actually works. There is an excellent chapter in the book Nuclear War: What's in it for You? written by Ground Zero. This is difficult reading, and children may need help understanding it.

13. Collect newspaper articles about conflicts around the world. Try to find articles which express both sides of each issue. Have a discussion or debate or brainstorming session as to how best to resolve the conflict. Share your ideas with others.

14. Visit a local toy store. Figure out the percent of games and toys that relate to war or weaponry. Talk with the manager about what you discover.

15. DEBATES: Older children might enjoy a debate on some issue related to the arms race. They might use, for information, the last five years of Time or Newsweek magazine as well as many of the books listed in our bibliography. Have them research both sides of the issue. Explain that they should come up with the major arguments and supporting facts on each side. Then conduct the debate, assigning to specific students the jobs of proposing or rebutting a resolution. It's important that you NOT emphasize winning or losing a debate, but to use it to explore the complexity of the issues involved. Here are a couple of topic ideas:

    1. Resolved that: "The U.S. should spend a larger proportion of government funds on social programs than on defense."

    2. Have children research and debate the dropping of the bomb on Hiroshima as though they were in Truman's cabinet. There is information available in biographies of Truman and of some of the generals involved.

ACTIVITIES FOR EXPRESSION

Expressive activities help children sort through confused and fearful feelings. Those who are prone to fantasy will find expressive activities particularly useful.

1. Children could draw or paint a picture of "A Place I'd Like to Live." They should be encouraged to invent any kind of place they want -- under water, in the sky, in trees, etc.

2. Have children draw or paint "A Peaceful Scene," keeping in mind the elements of peace -- color, texture, space, living things, etc.

3. Construct, with scrap materials glued onto squares of corrugated cardboard, "A Safe Place." Ask, "What kind of place makes you feel safe? A deep place? a high place? a nest? What makes a place safe? Why do we need safe places?"

4. Have children draw or paint a picture describing their feelings about CONFLICT. Each retelling about their creation to classmates can help dispel the fear they may feel. All views are accepted, no matter how much they may differ.

5. Have jigsaw puzzles available for your students to do together as a cooperative activity. You might set up one in a corner for children to do at "free time". UNICEF has a set of three puzzles on an international friendship theme for different age levels.

6. Gather in a small group and encourage the spinning of fantasies about how you would change the world. Hostile or violent fantasies should be accepted, for this vicarious revenge can help defuse anger and fear in a harmless manner. Venting of negative feelings may lead to realizing more positive ways to shape the world.

7. Use the words and phrases elicited by a brainstorm about "Peace" to write poetry (free verse or other). Have children illustrate their poems and display them in your school/community or make a class book for your school library. For examples of children's poems you may want to use My Shalom, My Peace described in the K-3 section.

8. Use role-playing, puppetry, costumes, skits, and story-writing to reflect your children's views about what's going on in their world. Have children create skits that solve a particular conflict -- the child is empowered when he or she is able to act out possible solutions to a problem.

9. Some children are more comfortable writing about their thoughts and feelings in privacy. Provide a journal for these children to write in.

10. Some people object to the traditional dove peace symbol because doves are rather violent and vicious birds. Have your students create new peace symbols using animals, designs, or whatever inspires them.

11. Have children design a world flag. What are some appropriate symbols? Colors? They might research international flag designs, and discuss common elements in them, prior to creating their own.

12. Have children design a "Banner for Peace." You might want to work with your school art teacher on this activity.

13. Present sample situations and have them state the different points of view. Try having them rewrite fairy tales from the point of view of the villain.

14. Study about hero(ine)s of the peace movement -- e.g. Gandhi, Martin Luther King, Jr., Helen Caldicott. Write a play or a book about one or more of these people to share what you've learned.

ACTIVITIES FOR ACTION

These are some suggestions for ways your students can bring their beliefs and feelings into the community. Some of these activities will require parent support and involvement. While it is not the children's responsibility to take action, it may help them feel empowered. The initiative should come from the children themselves and not from an adult's desire to express their own views.

1. Write to the President and other government representatives (local as well as federal). Have children express their views concerning the nuclear arms race and ask about what's being done.

2. Create posters and ask neighborhood shop owners to display them.

3. A group of children might like to meet with religious representatives in their community to encourage them to arrange a special program about nuclear war for a church or synagogue service. They might discuss this issue with their Sunday School teachers.

4. Some children could put on a play or neighborhood fair which has as its theme the prevention of nuclear war.

5. Children could put together a TV and/or radio message about the nuclear arms race. They might create an advertisement or a short program (including interviews, information, songs?) which could be aired on local stations.

6. Some children might like to design an advertisement which could be placed in a local or school newspaper expressing their views on the arms race.

7. Using blank labels, have children design stamps or stickers that can be affixed to envelopes.

8. Prepare a picture window display with your children and find a bank or other public institution in which to place it.

9. Have your students design a Peace Mural. Ask the public library or local City/Town Hall to display it, or paint directly on a blank wall (for example, at a construction site).

10. Learn some peace songs and have your children present them as a concert for the school or community.

11. Make books for your local school or public library. These could share information learned, personal perspectives on war and peace, poems or stories inspired by your discussions of these issues.

12. Have children create cartoons or comic strips with superhero(ine)s fighting for the eradication of all nuclear arms. Since the powers of superhero(ine)s are not real, you may want to follow this with a discussion of the powers people actually have to create change.

13. Some of your students might like to design placemats which can be laminated and placed in local eating places.

14. Organize a "Children's March for Peace" through your neighborhood. Children could display banners or posters that express their views.

15. If you have access to a button machine, have children design "Buttons for Peace". Recycled "wooden nickels" or heavy cardboard circles could also be used.

BOOKS FOR CHILDREN: GRADES 4-6

Arkin, Alan. The Lemming Condition. Bantam Skylark Books, 1977. In this book a lemming learns the goal of his species' suicidal run to the ocean. Excellent for discussion of many pre-adolescent issues.

Blume, Judy. Tiger Eyes. Bradbury Press, 1981. The story of a 15-year-old girl whose father has been shot and killed in a store robbery who moves to Los Alamos to live with relatives who work on nuclear arms. A lot of the usual Blume teenage romanticism.

Coerr, Eleanor. Sadako and the Thousand Paper Cranes. Dell Yearling Book, 1977. A fictionalized account of a well-known Japanese heroine. Sadako is found to have leukemia resulting from radiation exposure nine years earlier. In the hospital she folds paper cranes so "the gods will grant her wish and make her healthy again," but in the end she dies.

Davies, Andrew. Conrad's War. Crown, 1980. (For annotation, see Bibliography Grades 7-12.)

Degens, T. Transport 7-41-R. Viking, 1974. (For annotation, see Bibliography Grades 7-12.)

Hiroshima A-Bombed Teachers Association. Let's Cry for Peace. Peace Resource Center, Box 1183, Wilmington College, Wilmington OH 45177. Personal stories of two children, including a brief history of the peace movement, and very beautiful, moving poems and songs appealing for peace.

Meyer, Edith Patterson. In Search of Peace: Winners of the Nobel Peace Prize, 1901-1975. Illustrated by Billie Jean Osborne, Abingdon, 1978. (For annotation, see Bibliography Grades 7-12.)

Maruki, Toshi. Hiroshima No Pika. Lothrop, Lee & Shepherd Books, 1982. $12. Based on a true story. Recounts the day the bomb fell on Hiroshima from the point of view of a Japanese girl who was seven years old on August 6, 1945. The accompanying paintings are extraordinary. But both text and pictures may be too strong for some children. Use with caution although the publisher indicates that the book is suitable for grades 2 and up.

Nagasaki Prefecture Hibakusha Teacher's Association, In the Sky over Nagasaki: An A-Bomb Reader for Children. Available from: Peace Resource Center, Box 1183, Wilmington College, Wilmington OH 45177.

Nagai, Takashi, ed. Living Beneath the Atomic Cloud: Testimony of the Children of Nagasaki. Tokyo San-Yu-Sha. Available from: Peace Resource Center, Box 1183, Wilmington College, Wilmington OH 45177.

A Peaceable Kingdom: the Shaker Abecedarius. Illustrated by Alice and Martin Provensen. Viking, 1978. An alphabet verse with clear, quietly detailed illustrations supplemented on nearly every page by minute inscriptions representing Shaker thought.

Sampson, Fay. The Watch on Patterick Fell. Greenwillow Books, 1978. (For annotation, see Bibliography Grades 7-12.)

Sendak, Maurice. Where the Wild Things Are. Harper & Row, Publishers, Inc., 1963. The story of a misbehaved boy who is sent to bed, where he imagines a place inhabited by bizarre, scary creatures.

Silverstein, Shel. Where the Sidewalk Ends. Harper & Row, Publishers, Inc., 1974. A book filled with delightful poems and drawings for children.

Sone, Monica Itoi. Nisei Daughter. Seattle: University of Washington Press, 1979.

Steele, William O. The War Party. Illustrated by Lorinda Bryan Cauley. Harcourt Brace Jovanovich, 1978. A LET ME READ book. Participating in his ancestral ritual of war preparation, a young Native American looks forward to his first battle. When he actually participates in an attack on a neighboring village, he is horrified by the brutality that surrounds him.

Uchida, Yoshiko. Journey Home. Ahteneum, 1978. (For annotation, see Bibliography Grades 7-12.)

Uchida, Yoshiko. Journey to Topaz: A story of Japanese-American evacuation. Scribner, 1971. (For annotation, see Bibliography Grades 7-12.)

Zarambouka, Sofia. Irene. Washington, D.C.: Tee Loftin Publishers. (For annotation, see Bibliography Grades K-3.)

Zim, Jacob. My Shalom, My Peace. Edited by Jacob Zim. McGraw-Hill -- Sabra Books, 1975. A moving collection of paintings and poems on the theme of peace, by Arab and Jewish children.

GRADES 7-12: WHERE TO BEGIN

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GRADES 7 THROUGH 12: WHERE TO BEGIN

This section, designed specifically to help junior high and high school teachers and students plan their day or week of dialogue, includes teaching ideas and activities that will help students improve skills while they learn about the nuclear arms issue.

You can participate in a school-wide day of dialogue in a number of ways. On the simplest level, you may choose to talk with a few other people -- in faculty rooms, the student cafeteria, or after class with some friendly students hanging around your desk. Or you can do something special in one or all of your classes: a reading and discussion, a writing assignment to elicit student feelings and concerns on the subject, a few exercises, a debate, a film. You will find specific suggestions for all of these. Also included are teaching ideas that will take more than one period: projects, research, and visits from community speakers. You may want to encourage activities that will go beyond the classroom: activities planned by two or three teachers or by whole departments, by student clubs and organizations, or by coalitions of teachers, students, and parents. Some groups will plan informational displays with posters and pamphlets; others will plan a day-long symposium with speakers and films. Other schools will use the day to write letters, circulate petitions, or organize rallies.

By combining the middle school and high school materials, we do not intend to suggest that middle school and high school students are interchangeable. Instead, we recognize that many of the school situations are similar in terms of structure of the day and organization of subject matter. We realize that within any middle school or high school class, you will find a wide range of students. For this reason, we have included separate sections that describe some of the developmental stages of middle and high school students as they relate to the study of nuclear weapons. We urge you to read both sections, keeping your own students in mind.

Following the developmental section are some "starting point" activities. Their purpose is to discover what students are feeling and thinking about their futures, and to what extent the issue of nuclear war or the arms race is on their minds. Some, probably most appropriate for high school, are designed so that they can be initiated by students. As with all of the materials in this guide, feel free to adapt the activities so that they best meet the needs of your particular group of students.

DEVELOPMENTAL CONSIDERATIONS

MIDDLE SCHOOL

Early adolescence marks a profound transition between childhood and adulthood. Middle school students are challenging, unpredictable and highly varied in their interests, development, and approaches to the world. We need to support both their new, more adult, abilities and the more literal, here-and-now, childhood ways of thinking. This creates a balancing act for a teacher, producing both energy and tension as we work with a constantly changing group.

Dealing with concerns about nuclear issues in classrooms is not easy. Precisely because of their changing nature, middle school is not an easy place for students. They are always in motion. We see this in seventh grade lunch lines, which resemble nothing so much as perpetual motion machines. Intellectually, their minds are always moving as well, collecting and processing ideas from many, many areas -- sometimes we call this day-dreaming. We can capitalize on students' hunger for knowledge about the real world even as we work to understand their perceptions of the nuclear arms race and nuclear weapons.

Because of young people's vulnerabilities, however, it is important that we deal carefully with such a sensitive area as nuclear weapons. We recommend you read both the fourth through sixth grade and high school sections as you plan your day of dialogue. Your students may be more like a high school class in interests; or they may more closely resemble upper elementary school children. More likely, you will see a profound mixture of concerns, interests, and abilities. For this reason, it is important that you listen to children -- that you hear their perspectives, their worries, their ideas. As you listen, some of their patterns of thinking may indicate to you how to support them in wrestling with the profoundly important issues of the nuclear arms race and the dangers of nuclear weapons. Some of your students may appear to be unconcerned; some may be deeply frightened. We need to think carefully about ways of proceeding.

A long-term future orientation. Most students in middle school develop an ability to imagine a future and a distant past as well as a deeper sense of the complexities of the present. They can imagine a world beyond their own life spans and themselves as part of an onward flow of time. This ability is both a curse and a blessing: they can see a future life for themselves, but they can also imagine their own deaths, and understand that time will continue without them. This future vision has always been a characteristic of adolescents; unfortunately the nuclear arms race feeds the fear that often

accompanies this vision. We have to anticipate that some students will be frightened in middle school, precisely because of this newly emerging ability to imagine disaster and see it in reference to themselves. Middle school teachers can provide classroom activities that encourage students to envision an optimistic view of their future, a future that they can help to create.

Because of their interest in the future, many middle school students view themselves as members of their community, and see the complex interaction of adult roles that create and maintain thi[s] community. It is useful to build on this understanding by bringing [in] speakers from the community, by helping students find information th[rough] taking part in community events, by interviewing concerned adults, [and] finding ways of assessing community attitudes. We can also help t[hem] appropriate action. "Taking Action," on p.189has some suggesti[ons] may be useful.

Peer relations. With their new ability to consider others' perspectives, middle school students learn that others have opinions and images of them and their behavior. This creates the threatening realization that others' opinions carry social weight and have some real consequence for their acceptance or rejection by their peers. Peer pressure takes on a powerful role at this stage: for many students, it determines their behavior, their views of the world. They may actually give themselves over to their peer culture, letting others' views define their own.

This giving up of autonomy manifests itself in changeable attitudes and beliefs, so that many students may appear to have no set value system. A student who takes a strong position on an issue one day may completely alter it the next. Other students become rigid adherents of a particular point of view and become so identified with it that they feel personally attacked when it is criticized. It is important that we tolerate either manifestation -- students' views need to be accepted, whether they are rigid or shifting.

Class discussion is sometimes difficult, since some students feel that the exposure of their views on controversial issues exposes them to potential ridicule. Many teachers have found in-class written work (short notes, journals, or brief outlines) useful as prelude to discussion, so that children can participate in clarifying their views whether they talk or not; children who are silent in classes need help in expressing themselves in other ways.

Students often enjoy taking on others'roles, speaking as though they were someone else. Debates can be useful so long as the students understand that it's a formal exercise and they need not agree or disagree personally with the position they are taking. Students can role-play being students in the Soviet Union or in another country.

Most important, however, is that students be supported and listened to in our classrooms. The environment for discussion must be emotionally safe; children need to know we will protect them and their views.

Adults as necessary impediments. Because of a desire to become independent of adults and of the rules of adult society, students reject signs of adult interference, often perceived as adult attempts to "mess with" their belief systems. It becomes important, then, to avoid bias, since students will often reject any information that they consider propaganda. We can teach students about propaganda techniques and the dangers inherent in opinion manipulation. We can do close analysis of literature about nuclear issues. Analyzing television shows, films, and in-class panel presentations can help students learn to evaluate information for themselves.

As adult input is rejected, however, it still remains important in our students' lives. This very rejection of ideas shows that adults continue to influence students' ideas and imagination. At the same time that we support our students' need to disagree with each other and with us, we must also be sensitive to their vulnerability to criticism, whether from us or from peers.

The real vs. the ideal. Adolescence is a time of developing ideals, and the real world seems flawed in many ways. Many students express a sense of outrage that adults have created a mess for them. Some feel that they are being abandoned by adults, left to deal with a horrible legacy of nuclear arms.

We must listen closely to their concerns, hear their outrage, and show that some adults are deeply committed to helping them clarify their own views, find their own approaches to action, and express their feelings in their own ways.

Our students do have a perspective different from ours. If they can learn to listen to each other, they develop a sense of their own community. They need to communicate with each other, and perhaps with students from other classes, other schools, other countries. The comfort derived from shared perspectives contributes to emotional survival, and we must help them develop tolerance for a range of opinion and response.

HIGH SCHOOL

As we designed activities on nuclear war issues appropriate to secondary school classrooms, we found it necessary to think about some of the traits of older adolescents. We considered how high school students might react to a day of dialogue, and how we might respond. In this section, we share those concerns with you, so that you might think in advance about possible reactions of your own students.

Identity issues: View of the future. Adolescence is a time for individuals to define who they are, what their role is in the community, and what their personal future will be. Since the view we hold of our future has a direct impact on how we act in the present, we may find students whose attitude is "Nothing matters because we'll all be blown up in a few years anyway." This nihilism has always been a theme of adolescence -- unfortunately the world situation makes this a real possibility.

High school students can gain some sense of control over their futures through appropriate action, suggestions for which can be brought up in class discussions. Group action is especially empowering to the alienated adolescent. (See "Taking Action", p.189.) There are no simple tricks to solving the problem of the adolescent identity crisis; but as teachers we want to be as aware and sensitive as possible.

Choices already made: You may have some students who have already decided to enlist in the military or to work in a defense or nuclear-related field. This could raise issues of loyalty because of their personal commitment. Classroom discussions can support them and their classmates in developing informed personal points of view. Again, a sensitive and non-judgemental attitude on the part of the teacher goes a long way.

Complex peer relations. Acceptance. Being accepted assumes great importance. For this reason, some adolescents are often afraid to voice an opinion that might differ from their classmates'. To encourage students to feel safe to say what they feel, teachers should strive to set a tone of tolerance and acceptance of all opinions. In addition, we need to provide some opportunity for students to reflect and express their thoughts in privacy.

We have found no better way to do this -- in all subject areas -- than through the use of journals. Since writing provides a way to discover new ideas and feelings, using journals in conjunction with your nuclear awareness activities is especially valuable. Suggest that students keep journals to react to class activities, assigned readings, television shows, or discussions and interviews with family members or friends. Some may be willing to share their journals with you, or even with the entire class, after they've had time to do some private editing. If you do read the journals and comment on the ideas, even briefly, you set up a very personal dialogue with a student. Journals that are kept over a longer period of time give students a history of their reactions from which they can see patterns or changes.

Sex roles. Because our society tends to value overt displays of power, you may find that some adolescents equate war and military strength with masculinity and power. By the same token, the desire for world peace may be considered effeminate and weak. This makes open discussion difficult. If you find this attitude prevalent, try asking students to define their concept of strength or power. Even those who hesitate to state their views on war may be able to present alternate views of strength and/or power (e.g., the power of silence, passive resistance, non-participation).

Thinking about the world. Some people call adolescents "the conscience of our society" because of their high ideals and vision of what the world should be. We should be careful not to patronize them for being naive -- or get angry at them for being cynical, which may simply be a sign of their disillusioned idealism. Seeing the world as it is does not exclude also seeing it as it could be. We can validate our students' idealism and fight their cynicism by empowering them with the information and skills to take a stand on the way they want their world to be. (For a good activity to get students to focus on their idealism, see the "Twenty Years Hence" exercise on p. 85.)

Fairness. Adolescents often feel powerless and victimized by what they perceive the adult world has done to them. You may hear the cry "It's not fair," or you may sense silent resentment of adults for not taking care of them and the world. Facing the issue squarely with students is the best way to reassure them that many adults are committed to working with adolescents to ensure our future.

Autonomy and authority. For those high school students who already feel adult, the phrase "Day of Dialogue" is particularly appropriate. Many adolescents reject all opinions that come from an authority figure. Therefore, the tone of all our activities should be that we are not presuming to know all the answers about nuclear war and the arms race, but rather that we are attempting, through discussions, to find out our students' real concerns. Some activities are designed to give students the necessary skills and information to make their own decisions and thereby empower themselves. We want to be careful not to preach our own viewpoints, or to be biased in our presentations. We don't want students to see the day as a piece of propaganda; we want them to think critically about the issue, and with adults, to begin to form responsible opinions and make decisions. Talking about nuclear weapons and their dangers offers us a good opportunity to explore a problem with students on an equal basis. We are all vulnerable and concerned. We are not "authorities" who have "the answer"; adults and adolescents can be genuinely equal in their dialogue about the nuclear issues.

One good way to respect students' need for autonomy is to have them plan the activities for your school's day (or week) of dialogue. The "Starting Points" section that follows suggests several ways for students to begin talking with each other about their thoughts and fears concerning the arms race and the threat of nuclear war. Completing activities like these either on or before the day of dialogue provides a way for students to talk with each other about the issue, and to become interested in helping to plan ways for continuing the discussion in their school and in the community.

STARTING POINTS

Before giving any information, and before any extended dialogue on the issue of nuclear war, it will be useful for you to find out what your students are already thinking and feeling about the arms race. The activities in this section will give you an opportunity to introduce the subject to them.

EXERCISE 1: TWENTY YEARS HENCE: 2003

A good exercise to begin with is to ask students to think about their futures in very specific ways. This can be done through writing, simple listings on the board, discussion and art projects. Below are some specific activities:

1. Have students design and write a front page of a newspaper for the year 2003.

2. Have each student write a story in which he/she is the main character. The story should take place 20 years from now and should include specific references to what their lives are like.

3. Ask students to list four things about the fall of 2003.
   -- what they think will have happened to them personally?
   -- what will have happened in the world?
   -- what they fear will happen in the world or to them?
   -- what they would like to have happen in the world and to them personally?

4. Ask students to write or discuss five things they would like to change about the world right now.

5. Have students draw a picture of what they think the future will look like and a picture of what they would like it to be like. Discuss any differences between the pictures.

6. Have students write in their journals a paragraph or a list of statements about what they would like the world to be like when they become adults. Encourage them not to censor their ideas as impossible or too idealistic. The purpose is to create a vision.

7. Ask students to list all the ideas they wrote about in #6 on the blackboard. Divide students into small groups to discuss the various ideas. Ask them to come up with one goal per group they they can all agree upon

and to share their goals with the rest of the class. The whole class can work on formulating some steps that might assist in moving toward those goals.

EXERCISE 2: TWENTY YEARS AGO: OCTOBER, 1962

It may be easier for students to express their own fears if they can talk with people who experienced similar fears when they were about the same age as your students. The following exercise about the Cuban Missile Crisis in October of 1962 can help to raise some of your students' own concerns. This exercise also provides an opportunity for students and parents to begin a dialogue about the nuclear arms issue.

Tell students that they are historians. They are to put together a report about important world events that were taking place in October of 1962. What was life like for people in the United States at that time? You can give students specific dates if you want (it might, for instance, be easier to look at newspapers only between the 14th and 28th of October, 1962), but don't tell them at this time what happened on those dates. Brainstorm with them about information sources:

-- interviews with people who lived then, their parent(s), or an adult who was the student's age at the time
-- microfilm of old newspapers from the library
-- old magazines
-- history books
-- teachers and school administrators

Help students along the way to assume the role of reporters, researchers, and writers -- particularly if they have never done oral interviews or used old newspapers and magazines as resources.

Discuss students' findings. If the issue of fear came up in their research, ask students if they have ever experienced this type of fear. How are the students dealing with their fears? How did the adults they talked to deal with their fears (then and now)? What can people do to help them with their fears?

EXERCISE 3: THE RUSSIANS ARE COMING

Many students associate the Soviets with their fears of nuclear war. Therefore, activities which allow students to talk about their perceptions of the Soviets can alert the teacher to topics for further classroom study and discussion. These activities also give you a chance to talk about the differences between fears based on stereotypes and misinformation versus fears based on knowledge and reliable information. The following activities can help students begin to voice some of their concerns about the Soviets -- and about the threat of nuclear war.

1. Ask students to share the words and images that come to mind when they think of the Soviet Union or the Russian people. Write these on the board. Go over the list and ask students to identify where those images came from.

2. Repeat the activity. This time, ask the students to share the words and images that come to mind when they think of professional athletes. Where do those images come from? Which do they think are stereotyped? Which are based on incomplete information?

3. Go back to the list of words about the Soviet Union and the Russian people. Which of those images are stereotypes? Which are based on incomplete or inaccurate information? How does one go about finding out the truth about the Soviet Union and its people? What do students think the Russian people believe about people in the United States? Where do the Russians get their information? How many of those images and perceptions do students think are based on wrong or incomplete information about Americans?

4. If students have a hard time coming up with images or perceptions of the Soviets on their own, you may want to print the following statements on separate sheets of paper and put them up around the room:

   --The Soviets are out to conquer the world.
   --The Soviets want peace as much as we do.
   --The Soviets are mainly interested in protecting their own borders and national security.
   --We should destroy the Soviets rather than allow Communism to exist.
   --The Soviets and Americans should divide up the world and each stay in its own territory.

Tell students to stand next to the statement they agree with most. Give students 5-10 minutes to discuss the reasons for their choices in their small groups, and ask a spokesperson in each group to take notes on the discussion. Come back together for a report on the small group discussions. Give the rest of the students time to react and respond to each other, and then continue with the activities above.*

5. Two good follow-up activities to the above exercise is to read "The Fate of Man" by Mikhail Sholokov.
   (See p.177 for an annotation of this short story). You and your students may also want to plan a unit on the culture of the Soviet people. See "Letting the Soviets Enter the Dialogue" on p. for more resources on the Soviets.

* This is an adaptation of an activity from the Jobs with Peace Social Studies Curriculum (page 16). See resource section at the end of this guide for address and phone number of the Jobs with Peace Education Task Force's office.

EXERCISE 4: STUDENT QUESTIONNAIRE

The following questionnaire can be used to elicit young people's feelings about the threat of nuclear war. It was adapted from a longer one used by students of Newton North High School's (Newton, Massachusetts) chapter of STOP (Student/Teacher Organization to Prevent Nuclear War). It was used in all English classes at the school. Your students can use this questionnaire either in preparation for the Day of Dialogue, in planning their activities, or on the Day of Dialogue itself.

STUDENT QUESTIONNAIRE

1. Name (optional), age and sex of respondent.

2. List any ideas or images that come to you when you hear the word "nuclear".

3. How old were you when you were first aware of nuclear issues? What do you remember thinking? How is that different/the same from what you think now?

4. What do you know about civil defense? What do you think about civil defense?

5. Do you think that a nuclear war will occur in our lifetime?

6. Do you think that you could survive a nuclear attack on:
   our city?_____ our country?_____ the world?_____

7. Do you think the threat of nuclear war is:
   becoming greater?_____ remaining the same?_____ diminishing?_____

8. How has the threat of nuclear war affected yout hinking about:
   the future?
   the world?
   time?
   marriage?
   having children?
   other?_____

9. Which topics do you wish you knew more about?
   Physics of nuclear weapons ( )
   Human dimensions of nuclear war ( )
   Soviet-American relations ( )
   Economic effects of the arms race ( )
   The nuclear arms race and arms control ( )
   The effects of nuclear war ( )
   Nuclear weapons and energy resources ( )
   How adults are responding to the nuclear threat ( )
   How students can respond to the nuclear threat ( )
   Other_____ ( )
   Other_____ ( )

Please share the data with Educators for Social Responsibility, 11 Garden Street, Cambridge, MA 02138.

GRADES 7-12: SKILLS IN THINKING CRITICALLY ABOUT NUCLEAR ISSUES

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GRADES 7 THROUGH 12:
SKILLS IN THINKING CRITICALLY ABOUT NUCLEAR ISSUES

We think that two of the most important skills you can teach in connection with your day of dialogue are how to engage in effective dialogue, and how to avoid the common behaviors that block dialogue. Effective use of dialogue requires not only the mastery of certain skills, but the building of a perspective that stresses cooperation in human activities. The exercises that follow introduce students to these skills and perspectives.

We believe that dialogue is the best means to achieve change throughout the spectrum of human interaction, and the best alternative we have to avoid violence on any scale. Dialogue is the best way for your students to deal with the fact that their parents won't trust them with the car; it is the best way for the U.S. and the U.S.S.R. to negotiate arms reduction; and it is best for every interaction in between. As you explore with your students how to engage in dialogue, teach them also about its universality, and about its relevance to the nuclear issue.

Many people think of international negotiation as a process one cannot understand without a degree from Georgetown or the Fletcher School of Diplomacy. Hence the quickness to trust the "experts". We believe that we can achieve a more democratic foreign policy by teaching the next generation of voters that negotiating arms control is like negotiating a contract between a company and a union, like working out a divorce settlement, like convincing the school to sell better lunches, like getting the car for Saturday night. Some goals are harder to reach than others, but all are attainable by using many of the same methods.

BLOCKS TO DIALOGUE: 6 EXERCISES

The following exercises can show students how governments, newspapers, politicians and we ourselves use harsh or soft words that heat up or cool down a discussion. The choice of words is sometimes deliberate, sometimes unconscious. Students should be on the lookout for such words in their own lives, in articles and discussions about nuclear weapons, or about any other topic. They can usually spot the bias of the writer or speaker through these words. They can try to recognize and avoid using euphemisms and inflammatory words because they are so often impediments to dialogue.

Imflammatory words are used by both sides in the nuclear debate. They liven up the argument because they are vivid words. But they can also label and exaggerate, and make people angry. They do not enhance effective dialogue.

Statistics too can be used for communication, but they can also be misused. When they are distorted, statistics are a great obstacle to effective dialogue.

An excellent film that can be used to introduce the subject of dialogue is "Is It Always Right To Be Right?" This short animated film, narrated by Orson Welles, effectively poses the problem of how to create a dialogue among divergent perspectives. It is a parable that defines the effects on society of competing groups' unqualified claims to being right. Communication fails until one individual says, "I may be wrong". (Available from: Churchill Films, 662 North Robertson Blvd., Los Angeles, CA 90069, 213-657-5110.)

EXERCISE 1: HOT WORDS AND COOL WORDS

Part A: If you want to criticize, insult, or praise the following people's behaviors, what words would you choose? You may use slang.

Example: Wilma moves around when she talks, sits, reads, studies, etc.
Critical: "She's hyper".
Insulting: "She's schizzy, spazzed out, a twitch".
Praising: "She's active, energetic".

Now do these:

Behavior: Lee is five feet eight and weights 100 pounds.
Critical: Lee's (a) _____.
Insulting: Lee's (a) _____.
Praising: Lee's (a) _____.

Behavior: Gene leaves clothes on the floor of the bedroom for weeks.
Critical: Gene's (a) _____.
Insulting: Gene's (a) _____.
Praising: Gene's (a) _____.

Behavior: Chris looks out the window during class and then doesn't know what's going on when the teacher asks a question.
Critical: Chris is (a) _____.
Insulting: Chris is (a) _____.
Praising: Chris is (a) _____.

Part B: Harsh words can be used to express anger, to hurt or upset people, to make them seem like just a member of a group instead of individuals, or to dehumanize them.

During World War II, the Japanese were insulted and slurred by being called _____.

During the 1950 anti-communist period, communists were insulted and slurred by being called _____.

During the Vietnam War, Vietnamese were insulted and slurred by being called _____.

In your school, groups of people are put down with what labels?
_____
_____.

Why do people in your school use the above labels?
_____
_____

Part C: Inflammatory words can teach you to hate. Lt. William Calley was convicted of murder of at least 22 civilians in Mylai Village in Vietnam during the Vietnamese War (109 to 567 civilians were killed in all). Lt. Calley was sentenced to jail but freed on a Presidential pardon. He explains here what the word "communism" meant to him.

> I went to school in the 1950's, and it was drilled into us from grammar school on. "Ain't" is bad, "aren't" is good. Communism's bad. Democracy's good.
>
> In all my years in the army, I was never taught the communists were human beings. We weren't in Mylai to kill human beings. We were there to kill ideology carried by -- I don't know -- pawns, blobs, pieces of flesh. I was there to destroy Communism. We never conceived of old people, men, women, children, babies.
>
> I'm different now. If Americans said "Go to Mylai, kill everyone there," I would refuse to; I'd say, "It's illegal, and I can't be part of it."
>
> (Source: Lieutenant Calley: His Own Story as told to John Sack. Viking, N.Y., 1971.)

Part D: During the Vietnam War, euphemisms were used to blur realities that might upset or anger people. Match the following euphemisms with the realities:

1. pacification centers	a. bombing
2. protective reaction strikes	b. retreat
3. redeployment of American troops	c. burning of forests and farms
4. resources control program	d. civilian detention camps

Part E: Euphemisms were [illegible] during the Watergate period which resulted in the resignation of Pres[illegible] Nixon and the criminal conviction of several governmental figures. Pe[illegible].e used euphemisms to avoid admitting they did anything criminal. Match the euphemisms to the realities:

1. inappropriate act	a. illegal wire tapping
2. electronic surveillance	b. a lie
3. containing the situation	c. bribes
4. increments in the form of currency	d. an illegal act
5 statement no longer operative	e. cover-up

Answers to Euphemisms:
Exercise D: 1.d, 2.a, 3.b, 4.c
Exercise E: 1.d, 2.a, 3.e, 4.c, 5.b

EXERCISE 2: INFLAMMATORY WORDS IN THE NUCLEAR ARMS DEBATE

Part A: Half these words describe people who support increasing nuclear weapons for national security and half describe those who support decreasing nuclear weapons for national security. What is the effect of these words?

alarmist	Nazis	right winger
militarist	emotionalist	trigger happy
idealist	anti-American	soft on communism
dove	Fascist	military-industrial complex
hawk	utopian	reactionary
warmonger	peacenik	diehard liberal

Group the words under each of these headings. Use the dictionary if you need to.

people supporting increase

people supporting decrease

Part B: These words don't label PEOPLE but they are vivid images of aspects of the nuclear arms issue. What does each mean and how might it be an exaggeration?

Phrase	Meaning of Phrase	What might be exaggerated?
1. Holocaust		
2. Window of Vulnerability		
3. Domino Theory		
4. Extinction of the Species		
5. Doomsday Clock		
6. Free World		
7. Missile Gap		
8. Armaggedon		

Part C: The automobile industry chooses words like "cougar" to name its cars, because such words suggest speed, a touch of danger, or excitement. Use a dictionary to look up each of these names for U.S missiles. What does each word mean? What does each meaning suggest? Then make a generalization about why you think these words were chosen to be the names of missiles.

Name of Missile	Dictionary Meaning	Suggested Meaning
1. Pershing		
2. Lance		
3. Titan		
4. Minuteman		
5. Cruise		
6. Trident		
7. Stealth		
8. Polaris		

Generalization about why these words were chosen as names of missiles:

Part D: These words are used by government officials to describe some aspects of the U.S. nuclear arms strategy. What does each phrase suggest to you? What is the more direct and simple way to say the same thing? Why do you think these words are used instead of the simpler ones? Are they euphemisms?

Words	Suggested Meaning	Most Direct Way To Say It
1. nuclear device		
2. soft target		
3. nuclear event		
4. pre-emptive stroke		
5. European theater		
6. nuclear deterrence capability		
7. nuclear exchange		
8. limited nuclear war		

EXERCISE 3: MORE EUPHEMISMS

Directions: Read each article and underline the controversial wording in each.

Do you think any of the controversial wordings are "euphemisms", or do you think they are accurate and direct descriptions of the real situation?

Trying to not say what they mean

Boston Globe Fall 1981

By Frank Greve
Knight-Ridder Service

WASHINGTON – On their way out at the Environmental Protection Agency are such words as "hazard."

By overuse it has become "a trigger word that excites the American public needlessly," according to John Hernandez, the EPA's second-in-command. Many industries agree, saying that the EPA has placed alarmist labels on pollutants in the past and then used the public concern, aroused about these pollutants, to justify extravagant regulation.

So Hernandez wants aides to "talk about 'degree of mitigation of risk' instead of 'degree of hazard'" and he has changed the name of the Office of Hazardous Emergency Response to the Office of Emergency and Remedial Response.

Another alarming word is "cancer-causing." To avoid its ominous ring, the EPA public affairs office decided recently not to publicize new agency findings that certain wood preservatives might cause cancer. And EPA releases no longer identify toxic chemicals that have been found to cause genetic abnormalities or birth defects.

"It might scare too many people," explained one press aide. "Health hazards aren't going to be mentioned."

Hernandez put it this way: "The average citizen is going to hear that his life is threatened by some chemical many fewer times. But when there is a serious problem, we certainly will ring the bell."

When it is rung, don't expect EPA "enforcement personnel" to answer. There's a move afoot to call them "compliance assistance officers" instead.

To date, the most extreme case of antialarmist semantics involved a Los Angeles area chemical dump that, according to a draft press release, had "exploded and burned." Indeed it had, sending 700 pound drums hundreds of feet into the air.

But when the draft came back from EPA Administrator Anne M. Gorsuch's office, the word "exploded" had been deleted. So had the names, descriptions and possible adverse health effects of the chemicals involved.

Japan's Texts Revise WWII

Washington Post 7/28/82

'Invasion' Becomes 'Advance;' Asians Become Irate

By Tracy Dahlby
Washington Post Foreign Service

TOKYO, July 27—School authorities here have revised textbook accounts of World War II, churning up a storm of protest and indignation among closest Asian neighbors of Japan—who accuse it of attempting to cover up the country's aggressive military past.

The controversy arose when Japan's Education Ministry recently disclosed changes in new books for the fall school term which, for example, replace the word "invasion" with the apparently more neutral "advance" to describe the Japanese Imperial Army's attacks in China in the 1930s and in Southeast Asia and the Pacific in the 1940s.

The governments of China and South and North Korea have charged that the revisions involved sweep aside facts crucial to accurate historical interpretation.

Officials of the Education Ministry, contending the changes were made in the interests of "objectivity," have denied any attempts at censorship.

The Chinese appear to have been outraged by the textbook description of the Japanese invasion of China as an "advance" and the suggestion that the "rape of Nanking" in 1937 may have been provoked because Japanese soldiers were angered by the losses they suffered—at the hands of a relatively small number of poorly trained and equipped Chinese resistance fighters, according to contemporary accounts.

Prior to the recent revision, one textbook version of the incident read: "At the time of the occupation of Nanking, Japanese forces killed and assaulted many Chinese soldiers and civilians and plundered and set fires. Japan was internationally criticised for the rape of Nanking. It is said that the number of Chinese victims totaled 200,000."

The new version reportedly reads: "In the midst of the confusion of the occupation of Nanking, Japanese forces killed many Chinese soldiers and civilians. Japan was internationally criticised for the rape of Nanking."

The textbook revisions have stirred up strong protests from teachers' organizations and pacifist groups in Japan. Kosei Honda, an educator who heads a large organization of history teachers, says most Japanese today grow up largely ignorant of World War II or learn a version of it from increasingly popular war movies here that provide a flawed perception.

"The reason Japanese young people went to the last war is because they were told it was a "just" war. They were not told the truth and 3 million Japanese were killed," Honda said. "If we don't use the word 'invasion,' you tell me what we should call it."

EXERCISE 4: SEEING THROUGH STATISTICS

Don't believe everything you read just because it uses numbers; numbers can lie just like words can lie. In each example, consider what other information you need to understand the statement.

1. A teacher tells a class what a bad job they did on a test where the average score was only 69. Why might the average be unfair grounds for criticizing the class?

   Your explanation:

2. More people were killed in airplanes last year than were killed in airplanes in 1910. Was it safer to fly in 1910?

   Your explanation:

3. Boston, MA and Berkeley, CA have the same average temperature. Does this mean that if you visit Berkeley from Boston you can take along the same clothes you usually wear at home?

   Your explanation:

4. The number of reported rapes in the U.S. is very high compared to a few years ago. Therefore, the problem clearly is getting worse and none of the steps that have been taken against rape have worked (right or wrong).

   Your explanation:

5. A Boston politician said "The silent majority is against busing for integration." Her proof was a questionnaire sent out to 200,000 people. Eighty percent of the 23,000 people who responded wrote that they were against busing for integration.

   Is her statement backed up by her proof?

   Your explanation:

6. In 1941 the U.S. had not yet entered the war against Germany and Italy (World War II). A poll asked Americans if they favored the U.S. entering the war against Germany and Italy, and 29% said they favored American entry. A similar sample was asked the same question but also given several other alternative actions to choose from, such as the U.S. supplying our ally (Britain) with war material. Only 6% favored entering the war against Germany and Italy this time.

   How do you explain the difference? What is the people's true opinion?

   Your explanation:

7. President Reagan announced that his administration had appointed 314 women to high-ranking federal positions, compared to only 289 by President Carter. But the National Women's Political Caucus disputed his claim, pointing to Reagan's 52 Cabinet-level or sub-Cabinet level women appointees compared to Carter's 65. What is the significant difference in the two sets of numbers?

   Your explanation:

EXERCISE 5: EXAMINING STATISTICS ABOUT NUCLEAR WEAPONS

Ask your students to examine this chart carefully:

A comparison between U.S. and U.S.S.R. Strategic Nuclear Weapons*

Type of Weapon	U.S.	U.S.S.R.
Strategic nuclear launchers:		
LAND-BASED MISSILES -- ICBM	1,054	1,398
SEA-BASED MISSILES -- SUBMARINES	624	943
AIRCRAFT -- LONG-RANGE BOMBERS	348	156
	2,026 total	2,497 total
Strategic nuclear warheads:		
IN LAND-BASED MISSILES	2,154	5,504
IN SEA-BASED MISSILES	4,960	1,263
IN AIRCRAFT	2,412	156
	9,526 total	6,923 total

Total number of nuclear weapons in the world:
close to 50,000 (short, medium, and long range)
Total strength of those weapons: 1,000,000 Hiroshima bombs
Nuclear weapons per capita in the world:
equivalent to 3 tons of TNT per person
Amount being spent on the arms race: one million dollars per minute

*Union of Concerned Scientists

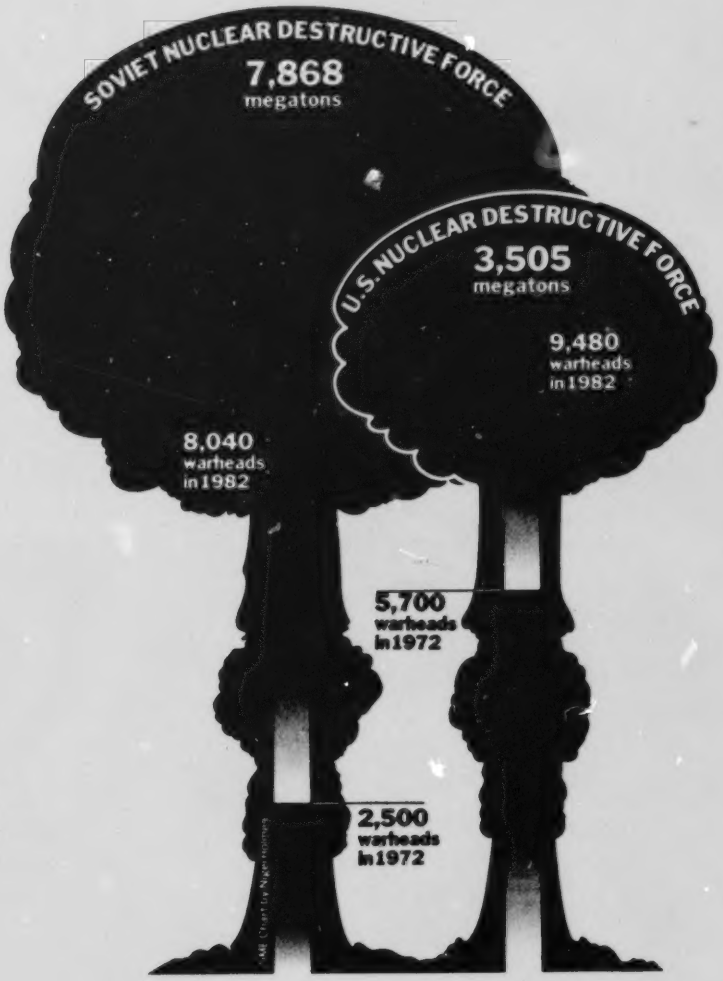
1. Figure out from the chart who has more strategic (long range) nuclear launchers. Who has more strategic nuclear warheads?

2. What is the relative strength of land-based, sea-based, and air-based weaponry of each side?

3. What statistics would
   --the Pentagon use to say the U.S. was in an inferior position?
   --the Kremlin use to prove the U.S.S.R. was in an inferior position?
   --the Swiss use to say both sides had achieved parity (a balance of weapons that makes them essentially equal)?
   --the U.N. use to suggest that "enough is enough"?

4. What other statistics might be important to consider when discussing parity between the U.S. and the U.S.S.R.? Students could research this question. The chart does not include short and medium-range nuclear weapons. Nor does it take account of the megatonnage (explosive power) of warheads (U.S.S.R.'s warheads yield more than twice as much megatonnage as U.S.'s warheads). Additional considerations: the accuracy of missiles (U.S.'s are more accurate), the vulnerability of missiles to attack (about 50% of the U.S.'s submarines are invulnerable), the distance missiles must travel to reach their target (missiles from U.S. to U.S.S.R. or vice versa must cross over much mileage which can affect accuracy).

EXERCISE 6:
EXAMINING STATISTICAL GRAPHS ABOUT NUCLEAR WEAPONS



Time
Magazine
3/29/82

To the teacher: have your students interpret the meaning of these two graphs. After they have drawn their conclusions, point out to them:

--The mushroom cloud graph shows megatonnage (explosive force)
--The stem-shaped graph shows the number of US/USSR nuclear warheads
--The cloud graph, taller and wider, looks more significant.

However, number of warheads MAY be more significant:

"Our firepower does not depend on a large blast far away from the target. Our greater technical skill has enabled us to build smaller, more efficient missiles and smaller, more accurate warheads."

(Source: Freeze! by Senators Kennedy and Hatfield)

ANSWER SHEETS

Exercise 2.A:

Put-downs of people in favor of nuclear arms	Put-downs of people opposed to nuclear arms
1. militarist	1. alarmist
2. hawk	2. idealist
3. warmonger	3. dove
4. right winger	4. emotionalist
5. Fascist	5. anti-American
6. trigger-happy	6. utopian
7. military-industrial complex	7. soft on communism
8. reactionary	8. diehard liberal
9. Nazis	9. peacenik

Exercise 2.B:

1. Holocaust means the complete destruction of people by fire, often referring to the Nazi mass murder of Jews and others in World War II. A nuclear war, however, might not destroy ALL people in an area as the term seems to imply.

2. Window of Vulnerability refers to a gap between the number of U.S. and U.S.S.R. arms, implying that it is large enough for the U.S.S.R. to attack us while we are helpless. The differences in our arms supply, however, might balance out in the end, so that there is no "gap."

3. The Domino Theory refers to the idea that if one country "falls" to the Communists, the momentum of its falling will cause nearby countries to "fall" to communism after it. Since each country is different, however, it might be the economic, political, and social conditions that determine whether a country will become communist, not just the example of a neighboring country going communist.

4. Extinction of the Species refers to the theory that multiple detonations in a nuclear war could destroy the ozone layer which could make the earth uninhabitable for human beings and perhaps even all animals and plants. This possibility, however, is theoretical and the effect of nuclear blasts on the ozone may be minor.

5. Doomsday Clock is a symbolic image to show how close we are to inevitable nuclear war. Doomsday means the final Judgement Day in the Christian religion. Depending upon international tensions, dangerous arms advances, and threat possibilities, the clock has been set at four or eight "minutes to midnight." Nuclear war may not be inevitable, however, if present safeguards and the strategy of "deterrence" are effective.

6. Free World is used to describe non-communist governments. Not all non-communist governments allow freedoms Americans consider essential, such as the freedom to vote, have a jury trial, or speak out freely; not do communist governments prohibit all such freedoms.

7. Missile Gap implies a "hole" in our "armor" of weapons in the same way that "window of vulnerability" does.

8. Armaggedon refers to the last decisive battle between good and evil just before the Judgement Day, according to the Christian Bible. A nuclear war may not be extensive enough to be compared to a final judgement day, however.

Exercise 2.C:

1. Nuclear device suggests a machine, a gadget.
   Direct meaning is nuclear bomb.

2. Soft target sounds gentle, harmless.
   Direct meaning is non-military targets, especially cities.

3. Nuclear event sounds like an ordinary event.
   Direct meaning is a bomb blast.

4. Pre-emptive strike sounds preventative, defensive.
   Direct meaning is a first strike made under the assumption the other side is planning to strike you.

5. European theater sounds like a play, a game.
   Direct meaning is Europe as a battleground.

6. Nuclear Deterrence Capability sounds like the ability to prevent a nuclear war.
   Direct meaning is ability to wage a war designed to make your enemy too afraid to attack you.

7. Nuclear Exchange sounds like a friendly trade.
   Direct meaning is two nations dropping bombs on each other.

8. Limited Nuclear War sounds like a minor, controlled war.
   This phrase ignores the tremendous destruction involved in ANY nuclear war.

Possible generalization: These words are euphemisms used to distance the reality of nuclear war, and to blur the actual dangers.

Possible answers to Seeing Through Statistics (exercise #4)

1. Most students got relatively good marks, but since an average balances out high and low numbers, the average came out low. NO ONE got 69. Test scores might have been 100, 100, 100, 95, 90, 90, 85, 80, 80, 65, 60, 55, 40, 0, 0 (the two zeroes were given to students who forgot their pencils and were not allowed to take the test).

2. No. Only a few planes flew back then compared to millions now. So a few deaths back then was still a dangerously high percentage of those flying.

3. No. Boston has extremes of temperatures in winter and summer. Berkeley temperature stays in the middle range pretty much all year round.

4. It could be that more women are reporting rapes now than dared to a few years ago.

5. Only approximately 10% of the people who were sent surveys returned them. The real silent majority is those who didn't send anything back. People knew the politician was against busing and may have refused to respond if they were for it.

6. Give people the full range of possible choices on entry into war (or on nuclear arms use) and they will make more precise and subtle decisions.

7. The larger numbers represent many jobs that were part-time boards and commissions, some of which meet only once or twice a year.

ENGAGING IN EFFECTIVE DIALOGUE: 6 EXERCISES

Important principles underlying effective communication and negotiation, as Roger Fisher points out in his book Getting to Yes. He makes it clear that these principles apply to disagreements between friends, family members, tenants and landlords, bosses and workers, partners, factions, and nations. The following are among the principles he stresses:

* When arguing or negotiating, don't get locked into positions -- a statement of what you are willing or unwilling to accept or do. Arguing over positions tends to make both parties act defensive and lock themselves into their positions (in order to "win", "be right", convince the other person, "save face").

* Positions usually develop from underlying feelings, concerns, needs, hopes, fears. Share your concerns, discover the other person's concerns, and discuss ways to resolve differences or conflicts.

* Enter the discussion with the idea of working together to resolve differences; don't set up an adversary (us against you) relationship where each side becomes so defensive that neither pays attention to the other's legitimate interests.

* Focus on how the issue affects you; not on what the other person does or on your judgement of him/her. ("I feel as if my opinions don't count" instead of "You never listen to students' opinions... You're insensitive.")

* Don't assume that you know what the other person thinks or intends to do. Try to see the situation as the other person sees it, feels it.

* Don't have your solution figured out in advance; be open to working out the solution with the other person. Allow him/her to participate in the process. Also, don't assume that there is one best answer to the problem. Create/be open to several possible solutions before considering/deciding upon solutions.

* When interests conflict, resolution should be based on some fair, objective standard (such as precedent, moral or legal standards, equal treatment).

EXERCISE 1: CHOOSING STRATEGIES

The following exercise illustrates for students the point that what you say, and how you say it, often determines how other people react to you, and how effective you are in getting your message across. Choose eight students from the class to take part in the role play with you. Ask the others to listen carefully to what you say to each student in the role play, and to make a note about how each student responds.

Explain that you are playing the role of a parent, and each of the students will take a turn playing your son or daughter. This is the situation: It is early evening, half an hour after dinner. It is the student in the role play's turn to do the dishes tonight. He or she has decided to rest a bit and watch some evening news on TV, before beginning the dishes.

Acting as the parent, you walk into the room and let the "child" know that you want the dishes done right away. Use one of the following "strategies" to communicate your message:

1. Name-calling, labeling, insulting: "You are ungrateful and lazy! Everyone does a fair share of work around here but you."

2. Mind-reading, telling the person what his or her motivations are: "You think that by waiting, someone else will do your dishes for you...You're just purposely trying to aggravate me...You know I want the dishes done, and you just want to get me angry."

3. Exaggerating, and using emotionally-charged words: "I can never trust you to do anything you're supposed to...You think you're better than everyone else; you always try to get out of your responsibilities."

4. Playing the victim, making the other person feel guilty: "I had a hard day at work, and I'm really tired. (sigh) I guess I'll go in and get those dishes done so they're off my mind, even though it's really your chore."

5. Phony issue, talking about everything but the issue at hand: "Look at you, just sitting around. No wonder your grades are so low this term! Another thing, I want those clean clothes of yours put away. And if you're awake again late tonight, I don't want to have to listen to your stereo again like last night!"

6. Rhetorical question, often in combination with exaggeration or mind-reading: "You just want me or somebody else to do your dishes for you, don't you? You think that by sitting there, someone else will do your chores for you, right?"

7. Silent treatment, snubbing: Walk around the room, sigh, glare, etc. -- but don't say a word. Give the student the cold shoulder.

8. Assertive, saying what you think without laying any trips on anyone else: "I want you to do the dishes now. It's your turn tonight and we all agreed that we'd do them right after dinner when it's our turn."

Discuss with the whole class the strategies used, their relative effectiveness, and student's reactions. Which were fair, which were unfair?

EXERCISE 2: ANOTHER EXERCISE IN CHOOSING STRATEGIES

Assign role cards to each student. Each card should have one of the above eight strategies listed on it. Assign the same strategy card to two or three students, if everyone wants to participate, or use the "fishbowl" technique, in which some students act as observers, carefully recording what happens, and later reporting on their observations. Tell students that you are about to give a homework assignment to them, and they are to communicate to you -- using the strategy listed on their card -- that they think the assignment is unfair. Give students a chance to think a bit about their strategies, and to talk among themselves or ask questions. Then give the most complicated homework assignment you can devise. Use unfamiliar vocabulary words, make the explanation long and complex, describe what you want them to do in a round about way.

Make a note of student responses and reactions, and lead a discussion about the exercise. Who communicated feelings and displeasure effectively? How? What strategy was each person using?

EXERCISE 3: CONFLICT SITUATIONS IN EVERYDAY LIFE

Asking students to analyze the conflict situations they come into contact with every day is a good way to spark a discussion about how they -- and the people around them -- negotiate resolutions to conflicts. Take the opportunity to define and clarify concepts (e.g., winner, loser, resolution, escalation, cause, truce). Discuss similarities between personal and international conflict situations. Listen to the language your students use to describe conflict situations and resolutions, and help them to think about it critically. Finally, spend time examining the process used to reach a resolution in each situation, and apply the Roger Fisher principles where appropriate (see page 112).

1. Ask students to recall a conflict which they witnessed or were part of. Then ask them to think about and discuss the following questions:

   --What was the cause of the conflict?
   --Why did it escalate?
   --How did it escalate?
   --What other choices could have been made to resolve the conflict?
   --What would have been the consequences?
   --What made this conflict a negative or positive experience?

2. Have students spend time observing a class of younger students. Then ask them to think about and discuss the following questions:

   --What kinds of conflicts did you see?
   --How were these conflicts similar to or different from the conflicts in your own life?
   --How were the resolutions to the conflicts you observed different from or the same as resolutions you would have chosen?

3. Have students interview each other about conflict experiences. As preparation, brainstorm with them possible questions they can ask each other:

   --What do you argue or fight about most often?
   --With whom do you argue or fight most often?
   --How do most of your fights or arguments start? How do they end most often?
   --Do you fight more often with people of your own sex or the opposite sex? Why do you think this is so?
   --How have your conflict situations changed as you have gotten older?
   --Are there ways of fighting or arguing so that no one (including yourself) gets hurt in the end?

4. Have students write about a conflict they have had, describing it from the <u>other</u> person's point of view. This exercise works best when it is written in the first person.

EXERCISE 4:
ARGUING VS. DISCUSSING CONTROVERSIAL SUBJECTS

1) Ask your students: what is the difference between an argument and a discussion? Write their ideas on the board. Give them hints: what about tone of voice, body language, choice of words? These are points they may bring out:

Arguments	Discussion
Loud, angry harsh tone of voice	Quiet, calm, even tone of voice.
Interrupting	Letting the other person finish a point before you start to speak.
Changing the subject	Sticking to each point until you've worked through it.
Insults, put-downs, sarcasms	Treating the other person with respect and friendliness.
Exaggeration (terrible, evil, never, everybody, always)	Using careful, exact words.
Pushy or threatening body language	Using calm face and hand motions.
Talking fast, rushing	Taking time
Thinking only of your next point instead of listening to the other person's idea	Listening carefully and seriously considering the other's views.
Faking it if you don't know something, never admitting the other person has a good point	Saying "I don't know" if you don't. Agreeing with the other person's good points.
The goal is to win	The goal is to find the truth.

2) Put the following practice topics on the board. Ask for two volunteers to argue/discuss one of the topics they disagree on in front of the class.

Topic ideas: handguns should be outlawed.

the driving age should be raised.

the death penalty should be instituted/abolished in this state.

3) Ask the rest of the class to take notes on the different ways the volunteers act when they are arguing compared to discussing, including whether they slip into argument when they are supposed to be discussing.

4) Tell the volunteers to start arguing their topic. After about a minute, call out "Now switch to a discussion." After a minute or two say, "Now argue again." Then, "Now discuss."

5) Have the class tell the volunteers how they acted when arguing and discussing and if they "broke the rules." Ask the volunteers which they enjoyed more, arguing or discussing, and which they got more out of. They will probably have enjoyed arguing more ("it's more exciting") but they will admit they get more out of discussing.

EXERCISE 5: NEGOTIATING CHANGE

Have students choose a school issue they feel strongly about. Encourage them to choose one they might realistically negotiate with a reasonable chance of success. (Examples: setting up a student lounge, bringing a controversial speaker into the school, getting a rule changed, etc.) Help them consider the following questions:

1. Why is this issue important to you? How does it affect you and others?

2. Who else feels strongly about this? How will you reach and involve these people?

3. Who is the key person/people you need to speak to: who has the power to make or influence final decisions?

4. How do you make yourself heard? How do you reach these people?

5. How do you effectively negotiate with these people?

6. What possible actions might you choose? What are the possible consequences of each action? Are you willing to accept these consequences?

Arrange a role play in which students practice negotiating with the key people they identified. Discuss the results of the role play in the context of what your students have learned about effective dialogue and obstacles to dialogue.

Next, encourage a group of students to engage in the real thing, and help them set up their first appointment. Insist that the group keep the rest of the class informed on each step of their negotiation process. Be prepared to help them deal with the disappointment of loss -- if it comes to that -- though persistent negotiation, thoughtfully managed, rarely leads to total loss.

After students have had this kind of direct experience of negotiation, lead a class discussion that starts with this question: How does what we have learned about dialogue and negotiation relate to the nuclear arms question?

EXERCISE 6: WIN-WIN GAMES

Effective use of dialogue means being able to develop a perspective that considers the possibility of cooperation in human activities. The "Win-Win" games described here can lead to discussion about winning, losing, cooperation, competition, and adversarial relationships.

The idea of "win-win" games is that everybody wins. In the two games detailed here, the students do not know from the beginning that the games are cooperative; they simply play them in the way they choose to interpret the rules. Most will assume the game is competitive and this leads to follow-up discussion about the nearly automatic assumption that in any game situation, there are adversaries; the way to win is to make the other person lose. In each case there are important parallels for games played at all levels, from personal to international.

These games, Chocolate Kisses and Tug of Peace, are simple to set up, can be played in one class period, and demonstrate that cooperation is actually physically easier than competition and -- in these cases at least -- produces immediate abundant rewards in the form of chocolate kisses or prizes.

The Kisses Game

The point, which students should not be told, is that it is not against the rules to allow their hands to touch the desk without resistance nor for both partners to win kisses.

Setting Up:

You'll need a couple of bags of Hershey's kisses, other small candies, grapes or raisins. Tell the students the game will involve sitting across the table from a partner, left arm resting in lap, right elbow on the table, arm up. Ask them to clasp their partner's right hand! (Avoid using the term "arm wrestling" as it connotes competition: simply describe the position. If students mention arm wrestling, say that the position is the same, but the game is different.)

Make sure the students are set up in the proper position before giving them the rules, and allow no talking once you have explained them.

The rules:

1. No talking.
2. You will receive one chocolate kiss for each time the back of your partner's hand touches the desk.
3. Keep track of your own "kisses".

Say "begin" and allow them 30 seconds to play.

Follow-up:

1. Before the "win-win" concept is explained, ask students to describe in detail how they played the game. Ask them to write their reactions and method of playing ("This was stupid." "I didn't really try." "I had a weaker person for a partner." "I tried my hardest." "I always lose." "I tried part of the time and then gave up.") Students might ask themselves if the way they behaved in this game reflects the way they behave in other situations. What parallels do they see? These observations can also be written privately and time given for volunteers to share insights.
2. Still before explaining the concept of "win-win", you might communicate the concept non-verbally by choosing a partner, assuming the arm-wrestling position, and offering no resistance. Frequently students will continue to offer resistance themselves and will force your arm down over and over without letting their own fall. Eventually someone usually realizes that he or she does not lose any kisses by allowing you to win some...and it's much easier.

3. Go over the rules and explain the way in which both partners can win kisses through cooperation. Ask students to notice the language of the rules, especially the use of the word "partner". Why did people assume it was a game of competition?

4. If you demonstrated the "win-win" idea non-verbally, ask students to describe the process and their reactions. (Were you frustrated? Did you feel foolish?) What did you have to do in order to communicate the process? (give in, lose, look foolish) What did you stand to gain? (more kisses?) What did you stand to lose (face? a few kisses, perhaps?) Use this language to relate to other "game" situations in their own personal relationships, in families, with friends, and then on a larger, even international scale.

5. See general win-win follow-up discussion tips at the end of this section.

Tug of Peace

Setting Up:

The point, which students should not be told in advance, is that it is not against the rules to allow themselves to be pulled over the line, nor for both sides to win prizes.

Divide the class into two groups.

Draw a line in the middle of the floor.

Set up the groups as in Tug of War. (Again, avoid using the term "tug of war" since it implies adversaries.)

Get the groups into position before reading the rest of the rules, and allow no talking after they're set up.

The rules:

1. There is no talking during the game.

2. Every person on each line must hold the rope.

3. Each time the first person at the front of one of the lines goes over the line drawn on the floor, the other line receives a prize. (Create a prize; points are one option; actual class participation points for the class on that day would be a real reward.)

Say "begin" and time them; allow a couple of minutes.

Follow Up: (see Kisses follow-up)

1. Again, have students describe and think about the way they played the game and their reactions to it. In this case, they should also consider their role in the group.

2. In this game the language is still important. Why do we hear competition in the word "line"? How does competition automatically develop when there are two groups?

3. As before in the Kisses game, once the students have listened to the language of the rules and discussed the reasons for having competition, the metaphor of the game can be extended to other life situations.

Gereral follow-up for all win-win games:

1. Is there a place for "win-win" in the world? Some students think it takes the fun out of playing. What is the "fun" that is missing? Is it possible to redefine "fun"? What is really meant by "fun"?

2. Why do we hear adversary language when there are two groups or two individuals? What leads us to see others as natural adversaries? Consider in each game, how neutral parties, even friends, become adversaries.

3. Why does the language of competitive games spill over into the rest of our lives? Does it reflect basic human nature? Can that be changed or evolve? Does life reflect games or vice versa? Are there other cultures that place less emphasis on competition?

ASSESSING DIVERGENT POSITIONS

Students feel caught in a bind when trying to make decisions about controversial issues such as about nuclear weapons. They hear many differing points of view substantiated by an array of statistical, historical and moralistic arguments. In trying to find the "truth" they find equally good arguments for a number of positions. They also find that there is much more to know then they have the time or interest to find out. Because of this students, as well as many adults, throw up their hands and decide to leave the decision to someone else.

We can help students see that we must take responsibility for making decisions even though we do not know all there is to know. To do this we can first share with students that it is impossible for anyone to know everything about an issue before making judgements and decisions. Even experts in the field disagree on these judgements, and make their own choices based on inadequate information. Most judgements are based on a combination of factual evidence and the values of an individual. We can encourage our students to understand the issue, make their own judgements, and, because we will never have all the answers, keep an open mind to changing their opinion as new evidence appears.

Second, we can help students by giving them the skills to evaluate the factual data and to examine the values and assumptions behind each of the positions as well as their own values and assumptions. And finally we can help them see that deferring to others does not remove them from the responsibility for or the consequences of the decision. Every non-decision is a decision supporting the existing situation. The responsibility for preventing a nuclear war is all of ours. All of us will suffer the consequences of a failure to prevent it.

At the heart of the discussion over the threat of nuclear war and the present course of the arms race is the challenge for each of us to take responsibility for creating a future that will be both safe and peaceful. The challenge is to overcome our powerlessness and become active participants in the process of democratic decision-making. Those issues must not just be seen as a problem, but as an opportunity to make a difference. Our greatest challenge is to communicate this to our students.

This chapter focuses on helping students think critically about divergent positions and examine how they may make well-informed judgement. This chapter starts with an editorial,"Citizens' Role Vital to Nuclear Debate," by Joseph F. Nye, Jr., that discusses why citizens have difficulty in making decisions about arms control and national security, yet why it is essential that they participate in these decisions. The next section is a student handout on techniques to use in evaluating arguments, followed by an exercise in assessing two opposing editorials on the MX missile. To carry this further there is an annotated list of "Especially Good Articles" for classroom use on various nuclear-related topics and helpful information on magazine and newspaper clipping services. The last section suggests how to use community resources to give your students still more practice in evaluating divergent positions on the nuclear arms question.

A CITIZENS' ROLE IN THE NUCLEAR DEBATE

The following article can act as an effective discussion starter for how your students feel about participating in the national debate over nuclear weapons. You may want to prepare your class by spending some time brainstorming why people do not participate in this debate and why people often feel powerless to create change. After reading the article you may want to discuss how Joseph Nye sees public opinion affecting arms control policy.

Citizens' role vital to nuclear debate

By Joseph F. Nye Jr.
Special to The Globe

COMMENTARY

Many citizens who are concerned about nuclear weapons policy are deterred from learning more about it for two basic reasons. First, they think their opinion doesn't matter. Many Americans seem to think: Why bother to learn about these issues if no one in Washington listens to what I say anyway? Second, some people, even if they want to learn more about nuclear weapons policy, strategy and arms control, hesitate because they think these issues are too complex.

But public opinion does matter in a democracy. The American public plays an important, but not always determinant role, in maintaining American security. This is true in two ways.

American public opinion influences American policy. How the individual votes, what policies elected officials believe the public supports, and the vigor of such demands, all can influence decisions in Washington. Progress on arms control has tended to follow the periods of heightened public attention to the nuclear issue. The first significant agreement, the Limited Test Ban Treaty of 1963, followed a period of broad public debate in the late '50s and early '60s. In 1972, broad public support paved the way for the SALT 1 treaty. And if one compares the negative attitude of the Reagan Administration toward arms control in 1981 with its current participation in two negotiations, one must give credit to the freeze movement in this country as well as pressure from our European allies. Public action has also influenced American policy in the other direction. In 1976, for example, President Gerald Ford chose not to attempt to finish negotiations for a SALT 2 agreement because he was afraid that an agreement would damage his chances of winning the Republican nomination.

Thus, to a certain degree, the vacillation of American policy toward nuclear weapons and arms control in the past decade has reflected the inconsistent messages politicians have received from the public. What the voter thinks matters. Whatever the mixture of arms control and defense spending incorporated into our future security policy, public support for the decisions will be an important factor in determining whether the government's policies can be fully implemented.

What the American public thinks can also influence Soviet policy. For example, public opinion in the West affects, to some unknown degree, Soviet perceptions of NATO's willingness to defend certain areas and the Soviet calculations of the credibility of a deterrent threat. If the greatest danger of nuclear war occurring is from miscalculation in which one side risks an adventurous policy in the mistaken belief that the other side will not respond, then public support is as important as our military hardware in deterring such a war. The national security policy which lacks a broad public consensus as its foundation is most likely to be seen as irresolute by potential adversaries.

The other reason some individuals are reluctant to learn about national security issues is that the whole subject appears to be too complex, too dependent on professional training or classified information. A year ago, a CBS-New York Times poll reported that 60 percent of the American people believed that the "question of a nuclear freeze is too complicated for the public to decide." The complexity of the subject is, of course, not made any clearer by the jargon of the field. A citizen hears about "circular error probable," "escalation ladder" and "fratricide" and thinks the issues behind this jargon cannot be readily understood.

It is true that the problems of nuclear strategy and arms control are complex: hence, the difficulty in coping with them. But it is not true that individuals, if they devote the time and energy to learn, cannot understand the issues involved. And in the process they may identify experts on whom they believe they can rely in matters of detail.

After all, elected officials who in this country make the final decisions about American security policy, are usually laymen in this field. They have not spent years learning the details of various weapon systems or the intricacies of arms control negotiations. In the United States, the people who control these complicated weapons are politicians without any special training.

The individual's responsibility for national security policy is not as great as that of the nation's leaders. But the individual's concern that a sensible balance be struck is, however, exactly the same. By and large, opinion polls show that the public wants both "peace" and "strength." They want enough nuclear weapons to deter the Soviet Union and protect a foreign policy interest. But they also want efforts to limit and control these weapons and reduce the prospects of their use. The result is ambivalence and a public opinion that can be pulled back and forth between those two poles as we have seen in the past decade. Where an Administration settles in the middle is strongly affected by public opinion. When the government strikes that balance, if you don't make your voice heard, someone else's will be.

Joseph F. Nye Jr. is a member of the Harvard Nuclear Study Group and has drawn these thoughts from its book "Living With Nuclear Weapons" published by Harvard University Press and Bantam Books.

STUDENT HANDOUT:
HOW DO I KNOW WHAT TO BELIEVE?

"How do I know what to believe?" Most of us do not want to be told what to believe, but many times we are confused by contradictory yet equally convincing arguments, especially in the debate over the arms race. What we need are the skills to determine the validity of conflicting points of view. These techniques can be identified, taught, practiced, and perfected. Six of these techniques are explained in this handout.

Examine Underlying Assumptions

Most arguments are grounded in some unstated or unverified assumptions. Try to determine what these assumptions are, and then subject them to careful examination. For instance, many anti-war arguments assume that Soviet leaders keenly recognize the horrors of nuclear war because of their own sharp memories of World War II, which cost the Soviet Union over 20 million lives. On the other hand, pro-defense groups may assume the Soviets are not peace-loving because their government is not as democratic as ours. On a more basic level, how does the presenter view the world around him/her? What assumptions does he/she make about the Soviets? about Americans? about the destructiveness of nuclear weapons, international negotiations, etc. You may choose to accept some assumptions and reject others, but it is important to isolate this choice from the rest of the argument. In addition, by uncovering the underlying assumptions of an argument, we are given a clear indication of the objectivity of the presenter -- the next step in assessing a point of view.

Determine the Objectivity of the Presenter

Take a long and careful look at the person who is presenting each side of the argument. What is his/her nationality? profession? affiliation? Do his/her affiliations increase or decrease the credibility of the argument? For example, consider the admiral in the Navy who states that we need more Trident submarines for the defense of our country. Does his position as a career Naval officer prevent him from making an objective judgement? Or does his position give him a unique vantage point and access to information that non-military people would not have? Assessing a presenter's objectivity is admittedly a difficult task, one that requires careful listening or reading. However, by doing this we avoid the pitfall of assuming a person is biased before we hear his/her side.

Determine the Values of the Presenter

All of the above -- a speaker's underlying assumptions, his/her objectivity in spite of affiliations -- are indications of that person's values, possibly the most important step in assessing divergent positions. What values does each speaker hold most dear? World peace? Maintaining a particular way of life? Often the values held by divergent speakers are surprisingly close, even identical. The difference may come in the means each one recommends to achieve his/her end. (An important step in successful negotiations is for both sides to acknowledge the points on which they agree, the points on which they disagree, and the points on which they are willing to negotiate.) In addition, identifying someone else's values often helps us to clarify our own.

Determine the Level of the Appeal

It is always a good idea to try to determine how the speaker or writer is trying to appeal to you. Is the speaker talking to your feelings and sentiments, i.e., your emotions? Or is he or she appealing to your logic and your reasoning? Be wary of any argument which appeals to your emotions at the exclusion of your reasoning -- or one that appeals to your reasoning and discredits your emotions. Whether we realize it or not, all parts of us contribute to the decisions we make. It is wise to acknowledge all parts -- physical, spiritual, emotional, intellectual -- in hearing an argument and in making our subsequent decision.

Examining the Evidence

Many people are reluctant to form an opinion on the arms race because they are overwhelmed by the amount of information surrounding the topic -- statistics on nuclear warheads, data on the effects of a nuclear explosion, budget figures on defense spending. There is no question that the more informed you are, the better able you will be to assess arguments in the arms debate. For example, the informed person would know that "missiles", "warheads" and "total megatons of nuclear missiles" have quite different meanings. The Soviets' lead in missiles and megatons will generally be cited by those subscribing to the pro-defense argument; the other side will usually cite the number of warheads, in which the U.S. has the lead.

On the other hand, it is not necessary to memorize every available fact before you can form an opinion. It is important to keep an open mind, and be willing to add to your knowledge whenever possible. One way of doing this is by weighing the factual support behind each argument. Whenever possible, the evidence should be specific, citing numbers, dates, incidents, quotations, etc., from reliable sources.

Ask: What is Not Being Said

Finally, what the speaker or writer avoids mentioning is often just as important as what he/she does include. Ask yourself: What is not being said? What statistics or facts are left out? What would be the results -- both short-term and long-term -- of the speaker's proposal? Consider the impact on all spheres of life -- not just military or strategic, but economic, physical, environmental, psychological. These important questions are often omitted from an argument, but they need not be omitted by you in your assessment.

Summary

By following these steps, you will in effect be analyzing opposing arguments by deciding, first, whether the underlying assumptions are valid; second, whether the presenter is objective; third, what are the values he/she holds; fourth, whether the appeal is to logic only or to emotions only; and fifth, whether the argument is substantiated by facts intended to enlighten or to mislead. These steps should help you to recognize well-rounded arguments based on assumptions and values that are acceptable to you.

The exercise that follows should give you some practice in applying these steps.

EXERCISE IN ASSESSING ARGUMENTS

Teachers: Following is an exercise in assessing divergent arguments, using two New York Times editorials on the MX missile. You may wish to substitute to other editorials, depending on the level of your students' knowledge. The questions may be used to assess any set of divergent arguments.

MX, the Deterrent

By R. James Woolsey

WASHINGTON — The underlying premise of the report issued by the bipartisan President's Commission on Strategic Forces is that there may be a better way to stabilize deterrence and reduce the risk of war — better, that is, than the course we have followed for a decade.

The interesting thing about the past decade's developments on strategic weapons and arms control is that no side in the debate is happy about the results. Neither those who are most concerned about our relative decline in strategic strength nor those most concerned about the lack of effective arms controls should want to continue the cycle we have been on since 1972.

Beginning with the bitter controversy in Congress over the SALT I interim agreement that year — and proceeding through Gerald R. Ford's effort at Vladivostok to limit offensive forces, Jimmy Carter's arms-limitation proposal in 1977 (quickly withdrawn), SALT II and President Reagan's Start talks at Geneva — each Administration has campaigned against and rejected its predecessor's approach toward both arms control and important aspects of strategic modernization. The price of this feuding between political parties, between the executive and Congress, between Presidential candidates has been high: no ratified treaties on offensive systems, no constraints on the growth of Soviet strategic forces, no agreed plan for providing a survivable American ICBM force over the long run.

The commission's advice to Reagan

If America wants to continue this record, each of us needs merely roll along in the ruts of the past decade. Those who struggle against improvements in accuracy for our strategic systems should continue to do so. Those who identify our strategic strength with a perpetual commitment to large ICBM's should stay their course. And so on.

Will the commission's new approach end the arms race? No. The report seeks something less immediately ambitious but more feasible and thus potentially more promising: to channel both sides' strategic modernization toward more survivable deployments and hence greater stability. Will these recommendations permit Moscow to remain complacent about the more than 600 new ICBM's of MX size or larger it has deployed in the past few years? No. The proposals seek to convince Moscow — in part by limited deployment of the MX — that it should begin to move away from such systems. Does the report propose moving now to match Moscow's numbers of large ICBM's? No. It strongly suggests that the long-run future of our ICBM force should be in small, single-warhead ICBM's because of their potentially greater survivability, and it encourages Moscow to move in a similar direction. Will these recommendations reduce the numbers of strategic launchers? No. Like several arms control proposals in Congress, the report concentrates instead on warhead limitations and reductions; it suggests that limitations on launchers have helped encourage both sides to put as many warheads as possible on each missile, thus contributing to strategic instability. Would the recommendations end the much discussed window of vulnerability of our ICBM's in the late 1980's? No. The report includes a judgment that ICBM vulnerability is a long-term problem that we can resolve in the 1990's with deployment of a small, single-warhead ICBM. In the meantime, the survivability of our strategic forces as a whole is sufficient to give us time to work on the problem.

These conclusions challenge many shibboleths across the political spectrum. But they also recognize the underlying merit in some arguments advanced by people with very diverse perspectives — since the report accepts that it is of vital importance both to reduce the risk of nuclear war and to constrain Soviet efforts at military expansion and blackmail. They point toward a package of strategic modernization and arms control that may offer a chance, perhaps the last one for some time, at a greater degree of national unity on these issues. Such unity would improve the chances of agreement with Moscow; it would also mean that although no one faction completely gets its way, each would have considerably greater confidence that a subsequent election — however it goes — would not turn things in a radically different direction.

To achieve such a consensus, as one senator has suggested, virtually everyone who has dealt with these questions will have to eat some crow. The commission and its senior counselors who endorsed the report — including a number of senior officials from Republican and Democratic administrations — have sampled crow for the last three months. I would suggest that if, as you take a first bite, you vividly visualize the least palatable dishes you might otherwise be forced to consume, its taste improves perceptibly.

R. James Woolsey, a lawyer, is a member of President Reagan's Commission on Strategic Forces. He was Under Secretary of the Navy in the Carter Administration.

Reprinted from the New York Times, April 12, 1983.

MX, the Danger

By Jerome B. Wiesner

Reprinted from the New York Times, April 12, 1983.

CAMBRIDGE, Mass. — The Commission on Strategic Forces, the panel of experts that the President appointed a few months ago to tell him how to base the MX missile, has recommended placing 100 of the controversial weapons in existing but reinforced Minuteman silos. This proposal would initiate a dangerous and costly spiral of the arms race that must be opposed.

The emotions raised by the MX include but go far beyond concern for the money involved; the 1984 defense budget contains many large, equally questionable expenditures. Yet the MX has become the symbol of an endless, escalating arms race. For great numbers of experts and worried citizens, it has become the personification of a military-industrial system beyond understanding or control.

Controversy about the MX stems in part from a debate about the ill-defined and changing strategic role of land-based-missile systems. It is impossible to justify any new missiles as part of our deterrent force, and a new deployment — with any basing mode — will undoubtedly generate another cycle of the arms race.

President Reagan and much of the public are confused about the need for the MX because they believed exaggerations about an emerging "window of vulnerability." Much of this concern disappeared when it was realized that even in the extremely unlikely event that a Soviet attack could destroy all of the United States' land-based missiles, remaining American nuclear weapons would still outnumber those of the Soviet Union. The many thousands of warheads safe against attack on submarines at sea would be much more than needed for convincing deterrence.

The fruitless search for a secure basing mode, the shifting rationale for the MX and the possibility of switching to single-warhead missiles (as suggested recently by former Secretary of State Henry A. Kissinger) highlight a longstanding dichotomy in our strategic arms policy: whether our goal is a secure deterrent or a first-strike force.

Several administrations have gone two ways at once — publicly advocating deterrence and yet seeking systems capable of destroying Soviet strategic forces — and the Orwellian doublespeak that goes with this dual strategic policy existed long before the MX or President Reagan came on the scene. But this Administration has been more forthright about its desire for a first-strike weapon.

The current debate about the MX started in 1978 under President Jimmy Carter, when the MX system he proposed, with its 2,000 super-accurate warheads, was seen by many as an attempt to build a first-strike force. But until Secretary of Defense Caspar W. Weinberger became an advocate of the MX, its powerful offensive capability was played down. Recently, MX advocates, including Mr. Weinberger, have finessed this difficulty by insisting that the best deterrent is a war-fighting capability.

If the execution of a successful first strike includes little or no damage to the people and property of the attacker, then the United States has not had a first-strike capability since the early 1950's, when the Soviet Union first accumulated enough missiles to retaliate against even a few of our cities. By the same criterion, the Soviet Union has never had a usable first-strike force. It is hard to find a scientist who believes that it is possible to make a leak-proof defensive system or an offense so powerful that no retaliatory force would survive. A single modern nuclear weapon exploded on target can obliterate one city, and 200 of them would destroy an entire civilization. Each superpower has more than 10,000 nuclear warheads available for a retaliatory strike. More strategic weapons will only make the situation worse. Even with the full MX system as part of an American first strike, casualties from a retaliatory blow by either superpower could exceed 100 million.

This is clearly unnecessary overkill, and it would be safe for both sides to reduce their arsenals by a big factor.

Obviously, too, halting additions to these checkmated forces would do nothing at all to change the scale of terror. Who can even imagine the difference between a retaliatory threat of 2,000 nuclear bombs or 20,000?

A decision to build the MX will be a signal that the Administration has not yet learned this nuclear lesson, or, worse, that like many of its predecessors, it cannot control the juggernaut of the military-industrial complex. It's up to us, the endangered species, to do our utmost to halt the irrational arms race. The first step is for the United States to give up the impossible search for a first-strike capability through the deployment of weapons like the MX. Only then can we seek the agreement, to reduce the vast and unusable nuclear arsenals, that everyone hopes for.

Jerome B. Wiesner, president emeritus and Institute Professor at the Massachusetts Institute of Technology, was science adviser to Presidents John F. Kennedy and Lyndon B. Johnson.

Questions:

1. *Understanding the argument.* What is each writer's central argument? What facts are used to support the argument? How reliable are these facts?

2. *Values and assumptions.* What can you determine about the way each writer views the world, specifically the U.S. and the Soviet Union? What underlying assumptions does each one make? What is the background or affiliation of each? In your view, does his background help or hinder his credibility? What is the most important value to each of the writers?

3. *Choosing between two positions.* What further information do you need to make your decision? What are the possible risks of each proposal? Possible benefits? How would each proposal affect the balance of power? world peace? national security? our way of life? our economic system? our psychological well-being? the Soviets? Europe? Which argument presents the strongest supporting evidence? Which argument is most consistent with your values?

4. *Discussion.* How do we resolve disagreements? Majority rule? Consensus? By alleviating the other side's concerns? Could these two writers negotiate an agreement? What values or goals do they both share? On what values do they absolutely disagree? What areas would they be willing to negotiate? (The class could role play a negotiating session by dividing into four groups -- one on each side of the issue, one to be the negotiating team, and one group to observe the process.)

Why is it generally difficult for people to change their positions?

NEWSPAPER AND MAGAZINE CLIPPING SERVICES

The most useful readings for you and your students may be those you clip yourself. They will contain the most current defense information, the latest arguments in the nuclear arms debate, and the disarmament news of your community. Our best advice to you in the matter of clipping is to avoid limiting your clips to articles that simply present facts and rational arguments based on facts. Facts and rational arguments are essential to your teaching about nuclear arms, of course, but your students need a political, moral, and personal context in order to grasp them. That is why an interview of a worker in an arms plant, or a letter to Ann Landers from a sixth grader worried about war, or the report of a priest dumping blood on a Trident submarine are at least as valuable.

To start your clipping collection, we have listed and annotated several articles in the previous section; most are either from the New York Times, widely available on library microfilm, or have been chosen by Promoting Enduring Peace, Inc. to be included among those that they will send you quickly and free of all but postage charges. Write or call Promoting Enduring Peace, Box 5103, Woodmont, CT 06460, (203) 878-4769. This collection is meant to be only a model for the kinds of articles you can

clip yourself, and the articles were chosen because they present a range of issues related to nuclear war and the arms race. Taken together, these clippings can introduce students to the fact that the nuclear weapons issue is a complex one, with more than simply "two sides" or positions.

No Nuclear News is a cooperative clipping service which is published six times a year. It contains approximately 50 clippings from newspapers around the country on the subject of nuclear arms and power. Cost: $7.50 a year; FREE if you send in clippings from your local newspapers. This could be a great incentive for students to read their local newspapers and to clip articles. Write to No Nuclear News, Box 149, Somerville, MA 02143.

ESPECIALLY GOOD ARTICLES

This section includes annotations of newspaper and magazine articles we hope will be useful in helping your students to assess various positions on the arms race. Many of the annotations also include ideas for how to use the articles, and many list accompanying questions. Try to read the articles yourself, and adapt them to your own particular needs. (Newspaper clipping services are explained in the next section.) The materials annotated here can be used in a number of different subject area classes -- as readings to spark discussion of the issues, as a way to prepare for a speaker, or as a source of information for a research or other project. This is not a comprehensive listing; please add to this list and send us articles or other printed materials you think are particularly good so that we can share them with other teachers.

1. "To Gain Peace in the Nuclear Age," by Roger Fisher (available from ESR). A stimulating background article for adults and students with strong skills. Good for classroom reading. Its rich anecdotes and illustrations can spark class discussions. Though addressed to professionals, article implicitly suggests that everyone can act to prevent nuclear war. The stirring conclusion is a call for action that can be excerpted and used separately for those students who aren't able to absorb the whole article.

2. "The End of the World Could Come This Year," from the Bennington (VT) Banner, January 14, 1982 (available from Promoting Enduring Peace). This is an interview with Dr. Helen Caldicott adapted from a longer interview in U.S. Catholic. Caldicott discusses our nearness to the brink of disaster. Her talk is full of striking images students can understand and peppered with numbers cited in a compelling manner. ("Our computers have failed 151 times in the last year. 151 times! We were 14 minutes away from nuclear war in November of 1979.")

   There is a second Caldicott interview available from Promoting Enduring Peace: "Waking America Up to the Nuclear Nightmare," by Rob Okun in New Roots.

3. "U.S. Military Strength is the Best Way to Ensure Peace," Caspar W. Weinberger, the Boston Globe, April 12, 1983. This article by Secretary of Defense represents an excellent summary of the Reagan Administration's arguments in favor of a nuclear arms buildup.

4. "Looting the Means of Production," by Seymour Melman, New York Times, July 26, 1981. A good background article for you and your colleagues and good research material for students who can handle difficult reading. Melman explores the effects of the arms build-up on the rest of our economy, and links decay of what it calls the economy's "infrastructure" to the diversion of brains, capital, plant and natural resources from the production of civilian goods to the production of weapons. It is full of facts and figures that could be starting points for student research or supporting material for debates and essays. Its strong point of view reveals an important dimension of the arms debate and challenges readers to examine the economic effects of our defense budget.

5. "Nuclear Fantasies," The New Republic, April 18, 1983, pp.9-10. An exceptionally well-reasoned and considered discussion of the defects of a nuclear freeze. An earlier article in this same magazine, "Unfreeze Arms Control," April 14, 1982, also is a comprehensive, somber plea against the freeze.

6. "A-Bomb Almanac," by Sidney Lens in The Nation, April 4, 1981. A compendium of ghastly figures: numbers and firepower of warheads on both sides, number of likely dead in a nuclear exchange, number of false alerts, number of nuclear nations, number of historical threats to use the bomb, etc. They are simply presented in a one-page unemotional summary. In their starkness, they may not mean much to some students. The article, therefore, is primarily recommended as a resource. However, you might ask students to bring these numbers to life with graphs of their own design or to contrast them with statistics of more common events. Or, use some aspect of the material for discussion or as the background piece for an essay.

7. "Despite Foes and Skeptics, Administration Presses Ahead on Civil Defenses," by Judith Miller, New York Times, June 10, 1982. Quotes experts on both sides of civil defense questions.

   "Russians, Too, Joke Sadly on Atom-War Survival," by John Burns, New York Times, June 11, 1982. Describes current thinking on the subject of Russian civil defense.

   Both articles portray the issue as a complex political and moral one that can not be resolved on purely rational grounds. The photo accompanying the Burns article shows Soviet school children donning protective masks in practice exercise to shield themselves from our warheads.

8. "Dangerous Myths About Nuclear Arms." Edward Teller and Frank von Hippel. Bulletin of Atomic Scientists, March, 1983. The Teller article, first published in Reader's Digest (November, 1982) is important reading for understanding the reasoning of those close to the Reagan Administration. Teller counters eight "myths" about the nuclear arms race. The Bulletin of Atomic Scientists article reprints Teller's article and the rebuttal by fellow physicist Frank von Hippel.

9. "Anti-Nuclear Position Proves Costly in Amarillo Home of Weapons Plant," by William K. Stevens, New York Times, March 21, 1982.

   Deals with controversy sparked by Catholic Bishop Leroy T. Mathieson who advised workers at a Pantex plant where warheads are assembled, that they should search their consciences and consider whether their work is morally wrong. Stevens reports that following the Bishop's statement, the directors of the local United Way cut off its support of Catholic Family Service, an agency of the Diocese, because it would not promise to refrain from counseling Pantex employees to leave their jobs for moral reasons.

   How would your students and their parents feel if a religious figure in their community suggested that they consider leaving their jobs for moral reasons? Is that a Bishop's business? On the other hand, what responsibility does the worker who makes warheads have to Soviet children who fear a U.S. attack? Bishop Mathiesen is also the subject of a Life magazine piece, "The Bishop at Ground Zero," July, 1982.

10. On August 6, 1982, the thirty-seventh anniversary of the American bombing of Hiroshima, the New York Times printed four articles: on page 1, a news piece by Judith Miller on the Congressional debate of the Freeze proposal; also on page 1, an article by Wallace Turner that begins "Energy Secretary James B. Edwards witnessed a nuclear bomb explosion for the first time this morning and said he found it 'exciting'"; on page B4, a thoughtful portrait by Henry Scott Strokes of Hiroshima's Peace Museum including a report of the contrasting reactions of Americans who visit it; and finally, an Op-Ed piece, "Survive Those Nukes!" -- Tom Wicker on civil defense.

11. "The Realities of Arms Control." The Harvard Nuclear Study Group. The Atlantic Monthly. June, 1983. This article is a chapter from the book Living with Nuclear Weapons, by six Harvard specialists, most of whom have worked in previous administrations in arms control. Intended as an objective analysis, the authors set out several major arms control positions -- one of which is a nuclear freeze -- and then explain the strengths and weaknesses of each. Their rational analysis, however, underestimates the significance of psychological, emotional, and moral considerations of the various positions. While the article (and book) provide useful information, it is misleading because it implies that solutions to our nuclear predicament will be found within a purely strategic framework.

12. "Vermont Soldier Turns to Peace," by Chris Chinlund, Boston Globe (follows on next page).

    Especially intended to highlight the issue of civil disobedience. Some suggested study and discussion questions:

    When can conscience take precedence over law? Broken down into smaller pieces that students can address more easily:

    What does Father Davignon mean by his remark, "This is a strong area of committed people who have worked hard on their farms, and the farms gave us not only roots but wings"?

    The article states that in James Bergeron's hometown, "patriotism usually comes before dissent." Under what circumstances, if any, do you think dissent is unpatriotic?

    What limits, if any, do you think should be put on American soldiers' rights to question military policy?

    Do you think Article 134 is a just law?

    Do you agree with the petitioners' idea that actions like James Bergeron's increase the possibility of nuclear war?

    Does such an effect justify breaking the law, in your opinion? Any law?

Vt. soldier turns to peace

By Chris Chinlund
Special to The Globe

NEWPORT, Vt. – Ever since he was a boy on the family farm, James Bergeron had dreamed of joining the armed forces.

With images borrowed from comic books and war movies, he later recalled, he longed for the excitement and adventure of military service, especially the Navy.

In later life, as he worked as a bartender in a ski resort near the Canadian border, his sense of patriotism sharpened as he restlessly watched Russia invade Afghanistan, Iran take American hostages, President Carter outline his Persian Gulf policy and the underdog US hockey team defeat the USSR.

By January 1980, the feeling was too strong to ignore. He enlisted.

Now, almost two years later, Sp4 James Bergeron, 30, is facing military court martial, the possibility of up to six months in federal prison and a "bad conduct discharge" that would permanently blemish his record.

His crime: Attending, in uniform, a Dec. 5 peace rally in Heilbronn, West Germany, with thousands of other persons.

The events that eventually placed Bergeron in Germany and his predicament were recreated through a series of interviews conducted this week in this Vermont town near the Canadian border, as well as by telephone with Bergeron in Germany.

He is the first serviceman since the protests of the Vietnam war era to challenge the army regulation forbidding demonstrating in uniform, according to his lawyer. For Bergeron, the act culminated a year of increasing attraction to the growing European peace and antinuclear movement, and frustration with America's defense policies.

"I weighed all the consequences before I acted, and I got over the fear before I did it," he said in a brief telephone interview Monday from the 385th Military Police Battalion in Ludwigsburg, West Germany.

"I have nothing to be ashamed of and will take it to the court-martial proceedings . . . I would do it again . . . even though I've been labeled un-American."

It is a case that has sparked sympathy and letters of "solidarity" from the European peace movement, as well as a flurry of support from his home town of Newport – a conservative northern Vermont town where patriotism usually comes before dissent.

Rachel Bergeron has enlisted friends and relatives in a petition drive on her son's behalf. The petition asks the US Army to drop its court-martial plans because "In a time of growing hostility between the superpowers and nuclear weapons production, we find such actions as James Bergeron's commendable as a means to decrease the possibility of nuclear war."

Staring at an old photograph of her son, bewilderment and worry deepening the lines on her face, Mrs. Bergeron asked: "Can you imagine that fellow spending six months in detention? . . . It breaks my heart to think of it.

"I want him to be treated justly, and I have hopes he will be," she said, describing James as a "nonaggressive and normal" young man who worked hard on the farm and never got into trouble.

It is unclear whether the petition drive or the "monitoring" under way by the office of US Sen. Patrick Leahy (D-Vt.) will alter the army's case against Bergeron. It is also unclear whether the charges against him will affect his request on Sept. 15 to be classified as a conscientious objector. Hearings on that request are proceeding parallel to the court-martial.

Major James Weiskopf, a spokesman for the Army in Washington, said yesterday that he is not familiar with the Bergeron case, which is being handled in Germany. He declined to comment, except to say it is usual procedure to take action against someone who demonstrates in uniform. The officer in Germany in charge of the Bergeron case could not be reached for comment.

According to Bergeron's lawyer, Jon Landau of the Central Committee for Conscientious Objectors in Philadelphia, Bergeron has been charged with violation of Article 134 of the Uniform Code of Military Justice. In essense, he said, Bergeron is accused of bringing disrespect to the American serviceman's uniform.

Bergeron said he was not surprised at the charge, only the swiftness with which military officials apprehended him after the rally.

He said he was detained, questioned about alleged ties to Communist and terrorist groups and then put in a cell. He said he went on a hunger strike but abandoned it after four days, when he found it did not help his situation. He said he is confined to the base until the court-martial, which is scheduled for January or February.

Bergeron denied being a Communist or terrorist. "The whole peace movement has been erroneously painted red by my nation's leaders," he said.

Members of Bergeron's family say that, while they support the nation's military, they fear it will be too harsh on James, perhaps using his case to set a chilling example to other would-be protesters.

"I think the military tends to be excessive on this kind of issue," said Bergeron's cousin, the Rev. Charles Davignon, pastor of St. Mary's Church in Newport. "Six months confinement – that seems to be an extremely strong sentence."

Fr. Davignon said he had seen the seeds of pacifism growing in his cousin but had not expected him to take such a strong stand. "I think Jim was challenged here by his brother, and I would like to think by me, to take a broader view of life and commitment," he said. "I didn't think he would go to this point, but I am proud of him."

As for conservative Newport producing someone willing to buck the powers-that-be in the name of peace, Fr. Davignon said, "This is a strong area of committed people, who have worked hard on their farms, and the farms gave us not only roots but also wings."

Professor Alfred Toborg, one of Bergeron's teachers at nearby Lyndon State College just before his enlistment, recalls Bergeron as a good student who "asked questions."

Bergeron's questioning of American military policy began one day when he was strolling through the Stuttgart University campus and saw a poster warning of atomic death, he said in a report for his conscientious objector hearing. The poster showed four American servicemen dressed in chemical protection suits standing in front of three missiles and announced a peace rally in Heilbronn.

Bergeron attended the gathering and a later one in Bonn – out of uniform – before going to the Dec. 5 rally in Heilbronn in uniform.

"I was often asking myself the question," he wrote later, "How would I feel if this was my country and it was my land that was being used as a base of operation for the armies of France, England and the US? How would I feel if my country was to be the likely next battleground for Europe's next war?"

USING COMMUNITY RESOURCES

As you begin to think about how to develop your students' critical thinking skills around the nuclear issue, it will be useful to utilize resource people who are already at work in your community. Bringing in speakers from the community into your classroom serves three purposes: it makes the day "special", providing students with an environment that may prompt them to think in new ways; it links students with adults in their community; and it allows you to explore and discuss the issue of nuclear war with your students, outside of your usual role as classroom teacher.

If you do decide to bring in an outside speaker, you and your students will need to locate an appropriate speaker, clarify with the speaker the premises s/he will bring to the discussion, decide on a format for the visit, and design follow-up activities. Ask some interested students to work with you in identifying the speaker. You might want to have students make the initial phone calls, and draft the letter of invitation. Have them choose someone from among themselves to act as the host. This student can meet the speaker on the day of the visit, learn enough about the person to introduce the speaker to the rest of the class, and open up the discussion with the first question to the speaker.

Bringing in a speaker will take at least three class periods -- one for preparation, one for the actual visit, and one for follow-up.

Locating an Appropriate speaker

Any adult in your community who has given thought to the issue of nuclear war and related issues is a potential speaker. Several national organizations have been formed to study various aspects of the nuclear issue; many have local chapters that can be used as resources for locating speakers. The following community groups provide speakers with a range of opinions on the subject:

The local clergy. Many religious denominations, particularly the Society of Friends and the Catholic Bishops, have been active on the issue of nuclear war. If your local clergy cannot recommend one of their colleagues, they may know of parishoners who have been active in working on this issue.

The local medical community. Physicians for Social Responsibility, International Physicians for Prevention of Nuclear War, and the Nurses Alliance for the Prevention of Nuclear War (addresses are listed in the resource section) are all national organizations with local chapters. Contact members of the medical community in your area, or call one of these groups to find out if any of their members reside in your community. Many members of the medical professions have given serious thought to medical effects of nuclear war, so there may be medical people in your community who would be willing to share their thoughts with students, even if they are not members of an organized group.

Other groups. Other good resources include such national organizations as the Ground Zero Community Education Group, the American Security Council, Americans Against a Nuclear Freeze, Student-Teacher Organization to Prevent Nuclear War (STOP), the Council for a Nuclear Weapons Freeze, and the American Friends Service Committee. Local nuclear education groups can be identified by using the phone book, talking to members of the community who are active in civic organizations, or by calling local political or educational groups: the League of Women Voters, the Sierra Club, or the Audubon Society. The Office of Civil Defense or the City Council can locate community leaders who are concerned with the issue.

A nearby college or university can also be a good source of speakers. Write the student government, the political science department, or any relevant student organization for suggestions. Ask whether the institution is affiliated with United Campuses to Prevent Nuclear War (UCAM) and if there is a local chapter on campus.

Science for the People, the Federation of American Scientists, and the Union of Concerned Scientists are three national organizations of scientists concerned about the issue of nuclear war.

If you live in an area with a high concentration of defense industries, you can find speakers to address the economic and job issues connected with the arms race. Contact local defense establishments, unions, military installations, or your chamber of commerce. Jobs with Peace, a national organization with local chapters in major urban centers, may also be able to put you in contact with local speakers.

Find out what position your local and state representatives, as well as your United States Senator and Representative, have taken on nuclear arms issues. If they do not have a local office, you can write to them in Washington, D.C.

Finally, be sure to contact your local press representatives. They are useful not only as possible speakers and resources for putting you in contact with other potential speakers, but as sources for providing local press coverage of the activities in your school.

If you plan on having more than one speaker, try to include several points of view. This will help your students to be better informed, and is an excellent follow-up to the "Assessing Divergent Positions" handout and exercise.

Briefing the Speaker

Be sure to clarify with any potential speaker the topics they feel comfortable raising, and the format the visits will take: a simple presentation with discussion and questions, a debate, panel discussion, or series of speakers over several days. Whatever format you choose, ask the speaker(s) to think of a few main points they wish to make, and to avoid elaborate presentations. Remember, you don't want this only to provide information, but also to begin a dialogue among all those participating. If the speaker

suggests a film, ask to show it before the speaker comes, as preparation, or the day after, as a follow-up activity. Try to keep the actual day the speaker visits a day of discussion and dialogue. If the speaker wants to use a short film in place of a beginning presentation, ask to preview it first, and use your best judgement. Finally, remind the speaker(s) of any time limitations, and assure them that students will be prepared with specific questions.

Preparing Students

Preparing students for the visit is probably the most important step in the whole process of bringing community people into your classroom. Before the speaker arrives, ask them also to be ready with some specific questions and topics for discussion.

Choose one or two activities from this guide to do in order to stimulate student concerns and thoughts.

When helping students to formulate questions, point out that questions can be grouped into different categories: information, opinion, and questions that elicit a "story". The visit will be more interesting and informative for everyone if they take part in the discussion and ask questions. One way to encourage participation is to type up and distribute a list of student questions and concerns generated the day before. Remind students that "open-ended" questions (that is, questions which require more than a simple "yes" or "no" answer) elicit more interesting responses. Suggest also that they have a piece of paper in front of them on which to list "on the spot" questions that come to them in the course of the discussion. Finally, go over with students how,tactfully,to break into a new topic.
(Be prepared to take responsibility yourself for making sure the speaker does not dominate the time with a lengthy presentation of facts and information, and let him or her know beforehand that you will indicate when the agreed-upon time is up and it is time for student input and questions.)

Designing Follow-up Activities

Be sure to plan time during the class following the visit to talk about some of the issues that came up. Possible discussion questions:

--What struck you most?
--What did you learn?
--What facts do you remember?
--What didn't you understand?
--What didn't you agree with?
--What stories do you particularly remember?
--What new questions do you have?

Encourage students to separate the speaker's personality from his or her ideas.

GRADES 7-12: CLASSROOM ACTIVITIES ON THE NUCLEAR ISSUE

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CLASSROOM ACTIVITIES ON THE NUCLEAR ISSUE

It is possible to design lessons that focus more specifically on one content area than another. However, many nuclear issues are interdisciplinary in nature: it is difficult to study the physics of a nuclear explosion without also considering the social question of whether humans should invent technologies with such enormous destructive force. The following twelve lessons are meant to be models to suggest the kinds of topics that can be discussed in particular subject matter areas. We've included science (The Physics of a Nuclear Explosion), social studies/history (Children of the A-Bomb), math (Mapping Exercise), and English (Literature, Writing). Feel free to use these exercises in any of your classes, though, and use the rest of the guide to find exercises which seem especially pertinent to your class or in your subject specialty. High school teachers might want to use the topics, questions, and suggested readings in the Study Guide at the beginning of the manual in their classes as well.

LESSON 1: CHILDREN OF THE A-BOMB

Recommended for:
Middle School
High School
English, Social Studies, et al.

History, social studies, or English classes can explore the human costs of dropping a nuclear bomb by reading stories told by the survivors of Hiroshima and Nagasaki. (Children of the A-Bomb: The Testament of the Boys and Girls of Hiroshima, compiled by Dr. Arata Osada, and published by G.P. Putnam's Sons, N.Y., 1959 is a good source.) Although the decision to drop the bombs was a complex one, many textbooks talk about it only in military terms, and leave out the cost in human life and suffering, and the struggle of the Japanese people to recover from the devastation and to build a world-wide peace movement.

In order to personalize what happened at Hiroshima and Nagasaki, we have included an oral history excerpt written by a girl of junior high school age who was in second grade when the bomb was dropped on her city of Hiroshima, and an account written by a woman who also lived in Hiroshima when the bomb was dropped, but who was in seventh grade at the time. This is difficult material. We anticipate that students will feel disturbed and perhaps even fearful after reading these stories. These accounts are also apt to raise many questions for your students. We encourage you to allow students time to reflect and express their feelings, and to take the time to research the answers to their questions with them.

From: Children of the A-Bomb, by Dr. Arata Osada

Takako Okimoto -- 8th grade girl. In 2nd grade in 1945.

The 6th of August 1945 -- which I do not forget -- the things that happened this day are deeply carved in my heart. That cruel war that snatched away so many precious human lives in one second -- even now I shudder when I think of it. I am all alone after losing my father and mother and all my brothers and sisters. And no one can take their place. All of them, as a result of that A-Bomb, were struck down one after another. My oldest brother was never found after he left to work with the Labor Service Group. My second brother's whole body was covered with burns and he died the next day at the Koi Grammer School. We left his body there at the Koi School and Father and Mother and the rest of us returned to the country. Since there were no good doctors in the country, my mother returned to town for treatment. At night a man came saying that she had suddenly become worse and called us back to town. When we arrived a strange, bad odor was rising everywhere, and the sights we saw! Everything imaginable was in ruins. You could not see a trace of the former Hiroshima. When we somehow managed to reach home we found that Mother had breathed her last a few minutes before. I cried for all I was worth. We cremated Mother's corpse on the stony river bed. Here and there all along the shore people were cremating corpses. And that evening just after we arrived back at my uncle's house in the country with Mother's ashes, my big sister died. Because I was so little I didn't know what I ought to do but I put all my energy in nursing the father and sister who were left to me. But my little sister who was so cute died the day after my big sister's funeral. Father was able to go to my big sister's funeral but he no longer had any strength to get up for my little sister's funeral. I wonder whether the priest who came for my sister's funerals had also breathed the poison? He was no longer around at the time of Father's funeral.

As they all died like this one after another, there is no doubt that my father who lasted the longest must have lost all hope.

But even so when I asked him, "Father, how are you this morning?" Father always answered to keep my spirits up. "This morning I feel a little better."

The fact was, his bodily health kept getting only worse. Full of anxiety over me because he was leaving me all alone, Father departed from this world.

Before he died, Father often said "Father doesn't want to die. Since our house and our clothes have all been burned by the A-Bomb, let's both of us go in our rags to the country and be farmers." He said this often.

On the 15th of August Japan finally became a defeated country. Many beggars appeared in front of the station, and thieves and armed bandits have turned up one after the other, and it has become a world where you aren't safe for a minute.

What has caused this sort of thing? It is because of war. If there were no wars such miserable people would never appear and the world would always be a place of peace. In the new Constitution, renunciation of war is determined. Even if it isn't a case of war between one country and another, even inside the country of Japan, in spite of the fact that we are the same kind of people, there is always war going on. As long as this is the case we will not be a peaceful country. In order to be a peaceful country, I believe we must first be considerate of each other.

Backpage

Hiroshima
A Survivor's Story

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"We have to remember, so that our children will not have to suffer"

By Shigeko Sasamori

Shigeko Sasamori was one of the twenty-five Japanese girls, survivors of the Hiroshima atomic blast, whom Norman Cousins brought to the United States in 1955 for plastic surgery; her story is in his book Present Tense. *She now lives in Los Angeles, practices shiatsu, and works at Cedars-Sinai Hospital as a night nurse caring for newborn babies.*

In the past year Sasamori has become an outspoken proponent of peace, addressing groups and gatherings all over the U.S. She has been through the most terrible of human-made events and yet she tells the tale with a heart free of revenge.

When the bomb dropped, I was in junior high school, seventh grade. At that time, Hiroshima was so crowded, they had to tear down some of the houses to make wide streets so that we could get out of town in case bombs dropped. So the young students cleaned up the wreckage of the houses by hand, picked up the building material and dumped it into carts—stuff like this. At 8:15 in the morning I had just gotten to the working place with my friend and classmate.

I heard the airplane and I looked up and saw something drop. At the same time—almost at the same time—a strong explosion. I felt it knock me down. The next thing I knew, all was dark, red and gray; it was what you can imagine you see inside of a burning fire, when you open a burning furnace—like that. Red and black and gray all around me.

At that moment I didn't feel any pain, any hurt, nothing. I was so numb, I was so shocked. I just wondered what was going on. I knew a bomb dropped. I thought it dropped on top of my head. In a few minutes, I don't know how long, the fire began to go away. It began to clear and I could see. Sort of like a gray dark afternoon. It was a very clear morning that morning, but it was very dark then. That must have been dust, ashes.

Then I looked around and I could see people moving. And what those people looked like you never could imagine—like nightmares. I thought I had been sent to some other country, another space. People didn't look like people anymore. All their clothes were torn, they were bleeding, their skin hanging off, covered with ashes and dust and hair burnt off. Just incredible. Like a monster. Not running fast, but just barely moving. The faces silent. I didn't hear any sound.

Of course, I didn't know which way to go. I was so lucky I went out, instead of toward the center of the city. I followed the people and went to the river. So many people came, there were people pushing each other into the water. And I was afraid that someone might push me into the water. But I escaped. I was very lucky that way. Also, nothing fell on me. People are under the house, they are not dead, but they can't get out. They scream for help, but who can help? Everybody is hurt. Just incredible.

Continued on page 87

Adapted, with permission, from an interview in the March 19–25, 1982, edition of L.A. Weekly *(5325 Sunset Blvd., Los Angeles CA 90027; $35/year). © 1982 by Los Angeles Weekly, Inc. All rights reserved.*

After I crossed the river, I tried to go to my school on the other side of the mountain. I finally got to the schoolyard. I sat down; then I don't remember when they brought me inside the door. It was days until I was treated. No food. Every once in a while they gave me a little water on my lips. They didn't give me water to drink. I didn't know which was day or which was night. I dreamed of water, of rivers, of oceans, of fountains, drinking water, swimming in water. I wanted water. Every once in a while I woke up and gave my name and address so that people could tell my parents. On the fourth day, I heard my mother calling my name, and I answered her and they took me home.

I was very lucky. I survived. I think about all those people who died.

What a miracle! All those days. My mother went every day, place to place, calling my name, looking all over. On all the streets were dead bodies. She would see a young kid and look at the face, look at the faces, the dead bodies, looking all over. And finally the fourth day she found me. Four days, nothing to eat, no treatment, and one third, more than one third of my body was burnt. I survived. I feel that it really was a miracle.

Of course, when I first saw my face, I couldn't believe it. I felt like ice-cold buckets of water poured into my body. That kind of feeling. I got chilly . . . horrible feeling. Thank God. Time . . . day by day. Time helped.

I was very lucky. They never found my friend. Maybe she went in toward the center; we'll never know. When I came to, myself, she wasn't there. We were so confused, we all looked like different people. Maybe she was there. Maybe I didn't recognize her. I don't know. I think about her now, about all those people who died in the war.

If we make another mistake, start a new war, those people's deaths will mean nothing. They were sacrificed for us and their spirits will be peaceful if we are peaceful. We have to remember, so that our children will not have to suffer those horrible wars.

You don't have to be in a high position, or be extra smart in order to help the world find peace. People who are poor, who are uneducated, they can help us work for peace in the world. All they need is their hearts. Because I am, myself, not an educated person, I'm not a good speaker, I'm not especially trained, just an ordinary, uneducated woman. But I wanted to help and so I tell the world my experiences. People need to be encouraged, because some people are afraid to do things. They think, "I cannot do that myself. A group will do it. By myself I can do nothing." Many people feel that way, I'm sure. But little things are important. It is an old Oriental saying that "If a little dust gets together, it makes a mountain."

Questions for class discussion after reading "Children of the A-Bomb" and doing at least one of the reflective/expressive activities.

1. Which person's experience was most difficult for you to read? Why?

2. Takako mentions the appearance of beggars, thieves, and bandits after the bombing. What is the explanation for their appearance?

3. What was life like for Takako and Shigeko immediately following the explosion?

4. What did Takako and Shigeko learn about the world as a result of experiencing the bombing of Hiroshima?

5. What messages do Takako and Shigeko each leave us with at the end of their stories?

Students may also want to study the decision to drop the bombs on Hiroshima and Nagasaki. Many excellent materials are available for this purpose. Two particularly good sources for junior high school students are:

--Linda Rosenweig and Edwin Fenton, "Personal Conflicts in the Modern Era," a filmstrip set published by Guidance Associates in 1977.

--Jonathan Harris, The Amherst Project, Hiroshima: A Study in Science, Politics, and the Ethics of Man, published by Addison-Wesley.

Activities to help students process "Children of the A-Bomb"

1. Give students time to think and react to the two readings by writing privately in journals. If they seem blocked, suggest that they just write single words or short phrases that come to their minds. Then see if there are students willing to share some of their responses.

2. Students can also express concerns raised by the readings by doing watercolor drawings, writing poetry (perhaps haiku), or taking part in other expressive activities (improvisations, mime exercises, playing music, singing, etc.). See the "Using Printed Materials" section for some poetry-writing ideas.

3. Have students write letters to either Takako or Shigeko expressing how they feel about the stories they read.

4. Students could also write letters to an organization that works with "hibakusha" (survivors of the bombings) in either Japan or the United States. Write to: Nagasaki Appeal Committee, 302 Haruki-cho, Nagasaki, Japan for addresses.

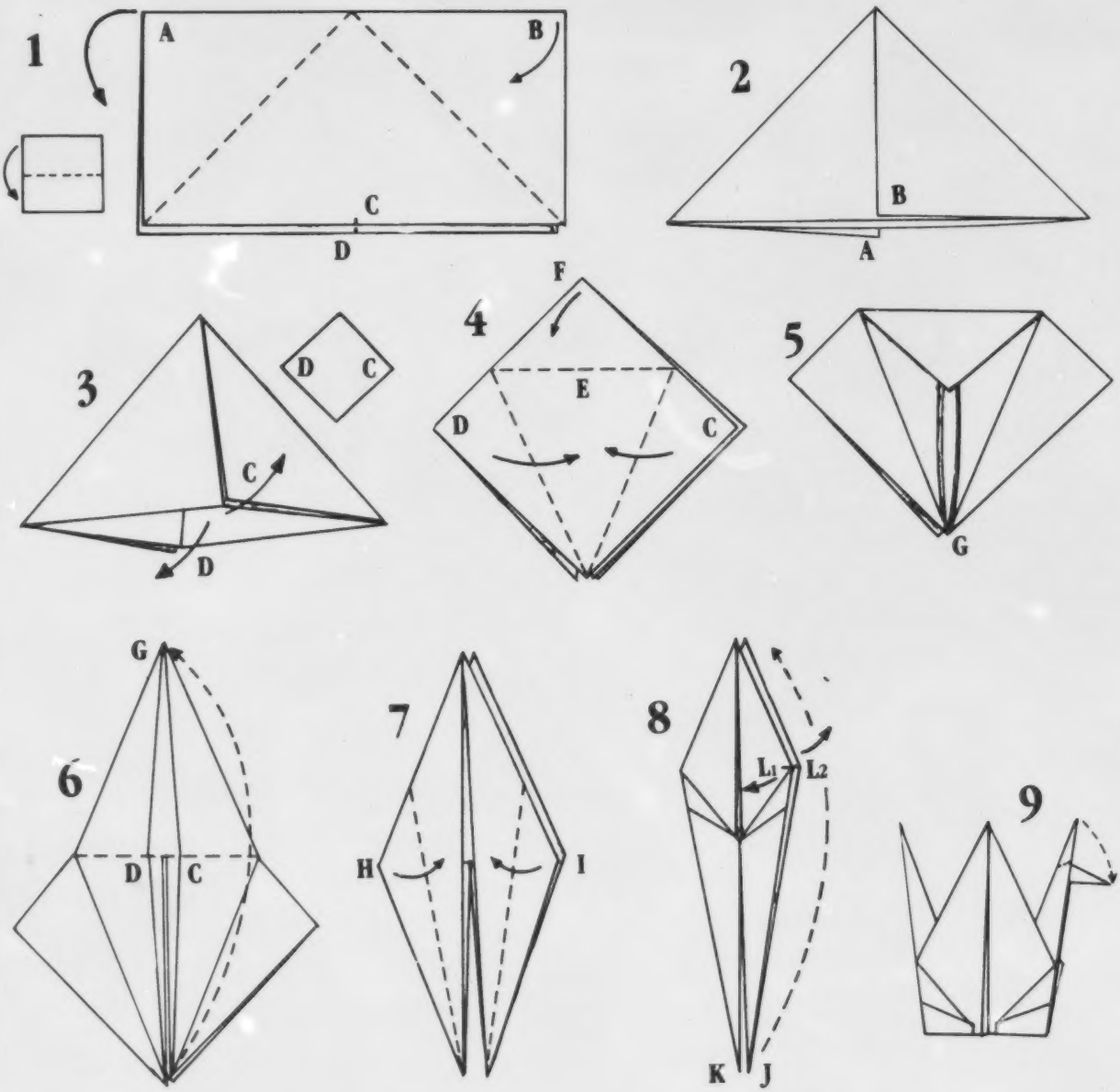
5. Students can collect magazine pictures to create a collage about feelings related to war and peace.

6. Students might want to write to students in Japan (see the "Taking Action" section for addresses), or exchange drawings expressing their feelings about war, peace, or their vision of the future with students in Japan.

7. Suggest that students read Sadako and the Thousand Paper Cranes by Eleanor Coerr to a 4th or 5th grade class. Sadako died of leukemia at the age of 12. She was two years old when the bomb was dropped on Hiroshima, and she got leukemia as a result of radiation exposure. When her friend came to visit her in the hospital, she brought Sadako a paper (origami) crane. If Sadako could fold 1000 cranes, her wish to live would come true. Sadako folded 644 cranes. After she died, her schoolmates folded the rest. She is a heroine to the children of Japan.

   The attached sheet describes how to fold the paper cranes. Students could teach younger children (or themselves) to make these cranes. Maybe they could join Japanese children in sending these paper cranes to Hiroshima for Children's Day (May 5).

How to fold a paper crane



1. Fold a square piece of paper in half horizontally. Then fold **A** back to bottom center (*D*) and **B** *forward* to front bottom center (**C**).

2. Your paper should look like this.

3. Pull **C** (the front) and **D** (the back) apart all the way until you have a flat diamond (as in small diagram).

4. Fold top layers of **C** and **D** inward to center line at **E** and fold down **F** along dotted line.

5. Your paper should look like this.

6. Now here's the tricky part: Unfold step 4. Take top layer *only* at **G** and pull it up making use of the crease (dotted line). This allows points **C** and **D** to fold back to center line along creases. Turn paper over and repeat steps 4, 5 and 6, ignoring new flap topped by point **G**.

7. With split at bottom, fold **H** and **I** inward so that edges meet center line. Turn paper over and repeat.

8. Temporarily open flaps at L_1 and L_2. Pull J up to top between flaps and close flaps (L_1 and L_2). Repeat with **K**. Fold down head. Fold down wings.

Alternatives, P.O. Box 1707, Forest Park, Georgia 30051

LESSON 2: THE PHYSICS OF A NUCLEAR EXPLOSION

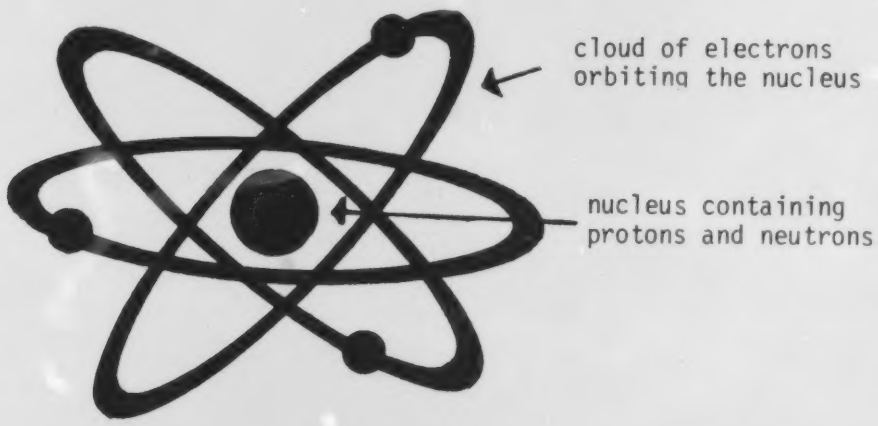
Recommended for
High School science

Note: Many high school students and some sophisticated junior high school students have asked teachers specific information about nuclear weapons. This article can help students realize that a nuclear weapon is a concrete device whose workings can be understood. This is an important section in making nuclear technology real. It is also important to point out that a nuclear explosion is significantly different from a conventional explosion.

You have probably heard people talk about two kinds of weapons: nuclear weapons and conventional weapons. Nuclear weapons are designed to cause huge explosions. Some of them are bombs which could be dropped from aircraft just like conventional (non-nuclear) bombs; some are missiles, which could be launched into the air from ships or planes or from land to reach targets tens, hundreds, or thousands of miles away. Whether a bomb or a missile,however, any nuclear weapon carries at least one nuclear warhead -- something made from very special materials that can release enormous amounts of energy in a fraction of a second.

Much more energy can be released by these special materials than by the same weight of a conventional explosive like dynamite. Also, the effects of a nuclear explosion on people and buildings and the environment are very different from the effects of a conventional explosion. What makes them so different is that right down on the scale of atoms, very different things happen in each case. This lesson will try to explain enough about atomic physics for you to understand what happens in a nuclear explosion, and the next lesson will describe the effects of a nuclear explosion on things around it.

Figure 1: an atom



ATOMS

Everything is made up of atoms, and every atom contains both a nucleus and a cloud of electrons that fly around the nucleus. The nucleus itself contains two different types of particles: protons and neutrons (see Figure 1). Protons and neutrons are almost identical except for their electric charge. Some particles have an electric charge and some do not. This charge comes in two types which, just out of convenience, are called positive and negative. Protons have a positive charge, electrons have a negative charge, and neutrons are neutral; they have no charge.

Compared with protons and neutrons, electrons hardly weigh anything, so most of the weight of the atoms is in its nucleus. An atom is extremely small and light: about one hundredth of a millionth of a centimeter across, and about a thousand million million million times lighter than a kilogram in weight. (For comparison, a pea is about one centimeter across, and a quart of milk weighs approximately one kilogram.)

Electric charge is responsible for all sorts of things. For example, any two particles with the same type of charge -- either both positive or both negative -- repel each other; they push each other away. On the other hand, any two particles with opposite types of charge -- one positive and one negative -- attract each other. Electric current is the flow of charged particles. In the atom, electrons and protons are attracted to each other because they have opposite charge, and the electrons keep circling the nucleus instead of flying off at a tangent. The interaction between protons and electrons, or between like charges, is called the electrostatic force.

In a nucleus with more than one proton, the protons all repel each other very strongly, because they all have a positive charge. What keeps the protons bound together closely, in spite of this repulsion, is a very strong force called the nuclear force, which is greater than the electrostatic force.

NUCLEAR REACTIONS

Things can happen to nuclei that release enormous amounts of energy. A nuclear explosion is much more powerful than the explosion of the same weight of dynamite, or TNT (TNT = trinitrotoluene, an explosive compound). That is because the energy released from these conventional, or non-nuclear, explosions, is released in chemical reactions. The energy released in a nuclear reaction is much greater, atom for atom, than the energy released in a chemical reaction, because the nuclei of the atoms, and the strong nuclear forces, are involved and not just the electrons.

The two types of nuclear reactions that can release energy are nuclear fission and nuclear fusion. Nuclear fission is what happens if one nucleus splits into two parts, and nuclear fusion is what happens if two nuclei are pushed together until they merge, or fuse. Different types of atoms have different numbers of neutrons and protons in their nuclei, and nuclear weapons are made from certain, very particular, types of atoms with nuclei that are easier to split or fuse than others.

There is a different name for each type of atom. Many names that you are probably familiar with -- like iron, oxygen, or carbon -- are simply the names of elements. An element is a substance in which all the atoms in it have the same number of protons. Elements can also have isotopes with the same number of protons, but a different number of neutrons, in the nucleus. For example, deuterium (often written D) is an isotope of the element hydrogen (H) because it has the same number of protons as hydrogen but a different number of neutrons. Deuterium has one neutron in its nucleus, while hydrogen has none. Another isotope of hydrogen is tritium (T); it has two neutrons in its nucleus and, like hydrogen, one proton (see figure 2). Hydrogen isotopes are used for nuclear fusion reactions.

Figure 2: Hydrogen and two isotopes

Some of the explosive materials used in nuclear weapons are made of especially heavy atoms called plutonium (Pu) and uranium (U). Plutonium and uranium atoms each have more than 90 protons and more than 100 neutrons in their nuclei. They are among the heaviest types of atoms that exist. Plutonium and uranium can be made to release nuclear energy by splitting, in nuclear fission reactions.

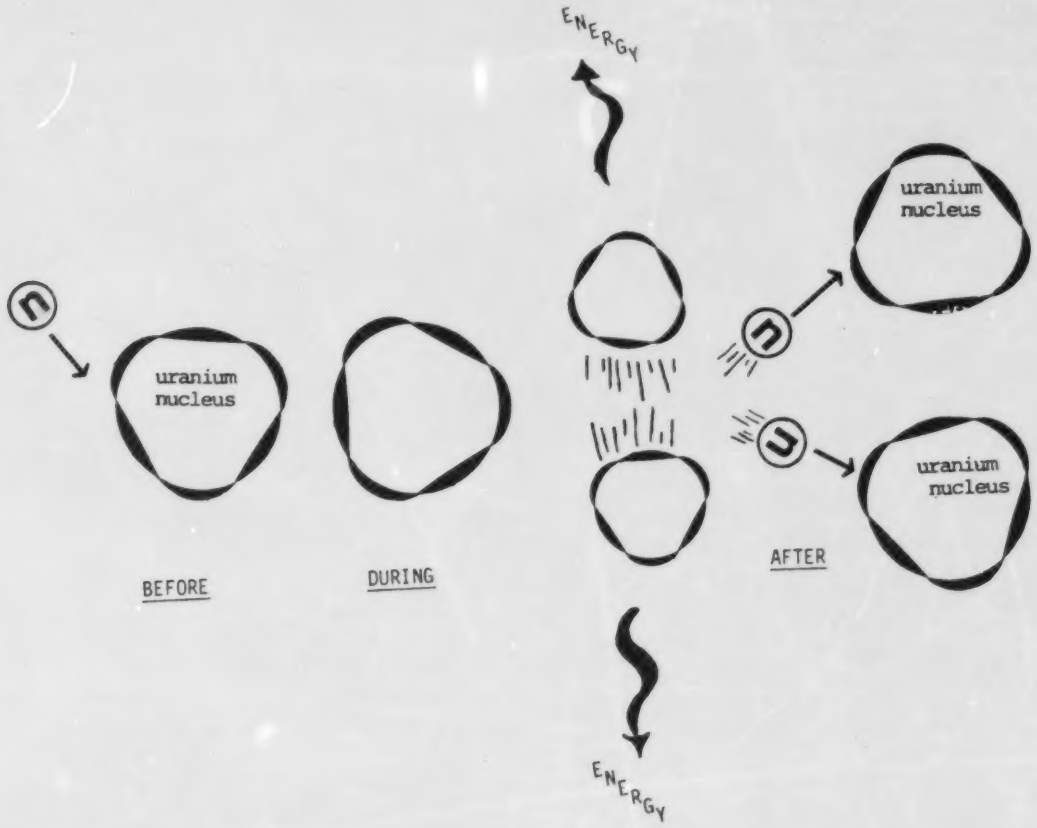
NUCLEAR FISSION

If one uranium nucleus splits, it releases a tiny fraction of a calorie (a unit to measure heat). But in a ball of uranium 2-1/4 inches across, there are 600 thousand million million million nuclei! That amount of uranium will release five million million calories! Atom for atom, this is a million times more energy than the energy that a chemical reaction, such as burning coal, would release.

One important fact about the fission of uranium or plutonium is that, on average, two neutrons escape -- it's not a perfect split. These neutrons do not combine, but are free to move around and can trigger the fission of neighboring nuclei by colliding with them. The release of two neutrons can trigger the fission of two nuclei which will each release two for a total of four. These four neutrons can cause the fission of four more nuclei, and so on until a chain reaction builds up (see Figure 3). The key to using nuclear fission is to have enough plutonium or uranium to generate a huge chain reaction. About 10 kilograms of plutonium, and nearly 100 kilograms of uranium, are used in a typical nuclear warhead.

Figure 3: Fission

$$U + n \longrightarrow Fragment_1 + Fragment_2 + 2n + energy$$

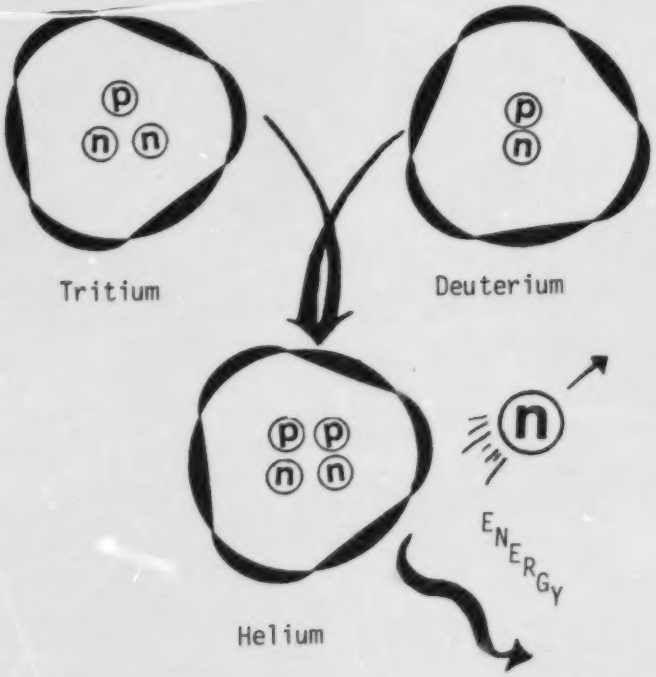


NUCLEAR FUSION

In order for nuclear fusion to occur, the nuclei have to be pushed together at incredibly high speeds or at very high temperatures. In a fusion nuclear weapon, the deuterium and tritium isotopes get the speed they need to fuse from the heat of a fission explosion utilizing plutonium. One deuterium nucleus and one tritium nucleus fuse to form one helium nucleus, one extra neutron, and energy (see Figure 4). The same weight of fusion material will yield about ten times the energy as the same weight of fission material.

Figure 4: Fusion

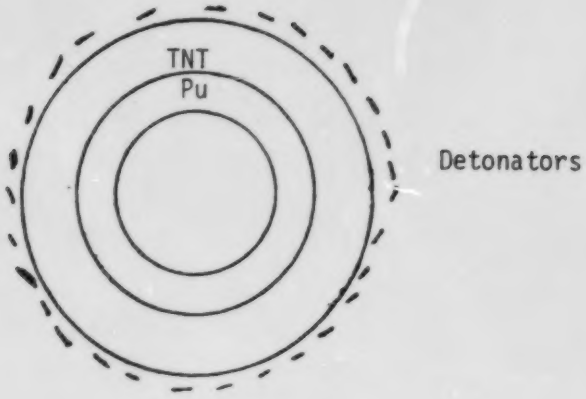
$$T + D \longrightarrow He + n + Energy$$



ATOMIC (FISSION) BOMBS

The first atomic bomb test at Alamargordo, New Mexico and the Nagasaki bomb were of the implosion type (see Figure 5). A hollow sphere of plutonium was surrounded by a second sphere of conventional explosive (TNT). The entire outer sphere of TNT was detonated by an electrical pulse. The resulting explosion blasted inward from all sides at once, thus compressing the plutonium into a critical mass. A critical mass is that amount of fissionable material needed to start a chain reaction. (With less than a critical mass, the neutrons produced in the fission will not strike enough surrounding nuclei to keep the reaction going.)

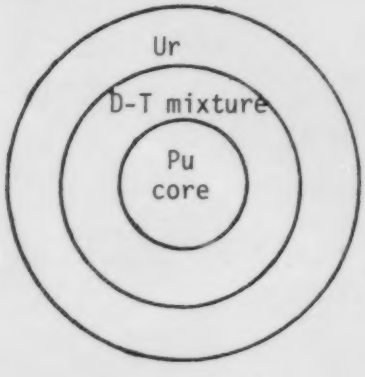
Figure 5: Atomic (fission) bomb



HYDROGEN (FUSION) BOMB

In a hydrogen bomb, a core of deuterium and tritium is heated and caused to fuse by the explosion of an atomic bomb. Most hydrogen bombs also include an outer shell of uranium around the deuterium-tritium core. The highly energetic neutrons that are released in the fusion process are absorbed by the uranium, cause its nuclei to fission, yielding extra energy. Thus, most hydrogen bombs are fission-fusion-fission devices (see Figure 6).

Figure 6: Hydrogen (fusion) bomb



A NUCLEAR EXPLOSION

The immediate effects of a nuclear explosion can be separated into three categories, corresponding to the three forms of energy released -- blast, heat, and radiation.

In a fraction of a second, the explosion of a bomb creates a powerful blast wave in the form of a wall of compressed air. The blast wave moves away from "ground zero", the point of detonation of a nuclear weapon, at a speed of about 12 miles a minute, roughly the speed of sound. The pressure created is a hundred times that of atmospheric pressure, so enormously high winds follow the blast.

In the central and hottest region of a nuclear explosion, called the fireball, temperatures reach millions of degrees and enormous amounts of heat (thermal radiation) are released. This radiation travels at the speed of light. The thermal radiation is followed by the blast wave the same way lightning is followed by thunder.

Radiation has many forms. One form is electromagnetic radiation, or light. The light we see is called visible light. Other kinds of electromagnetic radiation created from an explosion are invisible kinds of radiation, such as X-rays, ultraviolet (UV) light, infrared (IR) radiation, and gamma rays.

The mushroom cloud associated with nuclear explosions is caused when the fireball -- the seething mass of super-hot atoms that once made up the warhead -- starts moving upwards. As it rises, it drags up with it millions of tons of vaporized dust and dirt from the air and ground. Eventually, the dust particles cool down and fall, or get carried by winds over the earth until they settle. Fission fragments stick to the dust and get carried with them. Many of these fission fragments are radioactive; their nuclei are unstable and keep breaking down further, emitting neutrons, gamma rays (X-rays), beta particles (electrons), and alpha particles (helium nuclei). The dust that settles is called radioactive fallout. Radioactivity can last a long time, sometimes for thousands of years.

LESSON 3: MAPPING EXERCISE

Recommended for:
High School
Math, Civics, Social Studies

Because this exercise makes graphically clear the potentially devastating effects of a nuclear explosion on the environments and families of the students, there is some debate about its appropriateness. Handled sensitively, however, it can also be powerful and informative. After completing the mapping exercise, you will want to be sure to allow students enough time to share reactions and responses. Many students will feel depressed and powerless after realizing that their town or city could be hit by a nuclear warhead. For this reason, we recommend you continue the discussion by completing some of the other activities in the guide: bringing in a speaker from the community, doing some of the "taking action" exercises, or beginning a research project on some aspect of the issue.

Note: Before doing this exercise, you may want to spend some time reading maps with your students and using an improvised string compass to cover a wide enough radius.

What Would Happen if a one-megation bomb dropped in your area?

A megaton is a measure of the explosive power of nuclear weapons. One megaton is explosive force equal to one million tons of TNT. An actual attack could involve one or several bombs, each with an explosive force of up to 20 to 25 megatons. A one megaton bomb is 50 to 100 times the force of the atom bomb which the U.S. dropped on Hiroshima and Nagasaki during World War II.

Obtain one or more large maps of your town and surrounding towns; if possible, one that shows an area of at least 14 miles by 14 miles and includes streets and major landmarks. (Newsstands and drug stores are a good source; free maps from town hall will probably be too small.) Divide into groups of 5 to 10, each group with one map.

On your map, you will be drawing a series of concentric circles surrounding a target area. "Likely targets might be a local military base, industrial plant, research group, power plant, airport, and corporate headquarters."[1]

Choose a target and mark it with a black dot. From the target point draw six concentric circles (six areas of destruction) with the following radii:

.12 miles
.7 miles
1.7 miles
3.0 miles
5.0 miles
7.0 miles

On a separate piece of paper, each of you list/describe the damage you think would occur in the areas enclosed by each of the circles. Compare your responses with others in your group.

Each of you should then be given six "information strips." Read the information on each strip of paper. Decide which radius belongs on each strip and write it in the box in the upper left corner. Verify your answers with your group. Under "important landmarks" on each strip, list the buildings and puplic places that are important to you or that you often use: your home, relatives'/friends' homes, church or synagogue, town hall, school, library, community center, park, shops, movie theaters.

Share your responses and reactions with others in your group and with the class.

The explosion creates a crater about three blocks in diameter and 20 stories deep. Almost total destruction of people and structures.

Important landmarks in this area:

"In one-tenth of a second, people, vehicles, buildings, and thousands of tons of earth are swept into a luminous fireball, with temperatures reaching millions of degrees."[2]

Important landmarks in this area:

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1. Union of Concerned Scientists, The Threat of Nuclear War: Briefing Manual, p.60. This mapping exercise was adapted from the manual.

2. Ruth Sivard, World Military and Social Expenditures, 1981.

98% of the people killed by:
- --flying debris from buildings destroyed by blast pressure and winds up to 300 mph
- --massive fires or lethal skin burns from thermal radiation (intense heat given off by the nuclear explosion)
- --firestorms (occurring under certain weather conditions) which kill through heat and asphyxiation (fire consumes the oxygen and people suffocate, even in shelters)

Very few structures left standing

Important landmarks in this area:

50% of the people killed from falling buildings, flying debris, fires; 40% injured, half of whom might ultimately die.

Very strong structures might survive.

Important landmarks in this area:

50% of the people killed or injured

Some commercial structures, a few residents survive; many destroyed by fire, most homes blown out or leveled.

Gasoline storage tanks explode; intense heat from the fireball causes many combustible materials to burst into flames.

Important landmarks in this area:

Most buildings damaged.

25% of the people dead from injuries or burns.

Most people in the open receive third or second degree burns from thermal radiation or are blinded by the flash.

Most of the injured get little or no medical treatment because hospitals destroyed, doctors and nurses killed or injured, little medicine, food, or water that is not contaminated.

Many develop radiation sickness from fallout (radioactive particles of soil and debris from the explosion are spread over a large area). Symptoms are vomiting, diarrhea, anemia, loss of hair, increased susceptibility to infection, death (in severe cases).

Important landmarks in this area:

The format of this mapping exercise was adapted from the AFSC, "New Mapping Kit." The information was compiled from "The New Mapping Kit," A Citizen's Guide to the Arms Race, and World Military and Social Expenditures, Ground Zero, Nuclear War: What's In It For You?, and Crossroads: Quality of Life in a Nuclear World, Jobs with Peace.

OTHER ACTIVITIES ON THE EFFECTS OF A NUCLEAR EXPLOSION

1. Expand the map beyond your community and imagine the long-term consequences of an all-out nuclear war.

2. Draw or write a third-person account of what might happen in the event of a real nuclear attack.

3. Read the following article, "Nuclear War's Effect on the Mind". How do you feel about what the author describes? Can you imagine yourself acting in the ways he describes? Why? Why not?

Grades 7-12:
Nuclear Issue
Activities/155

Nuclear War's Effect on The Mind

By Robert Jay Lifton
and Kai Erikson

NEW HAVEN — "Scenarios" about fighting, recovering from, or even "winning" a nuclear war tend to be remarkably vague about the psychological condition of survivors.

Some commentators simply assume that survivors will remain stoic and begin to rebuild from the ruins in a calm, disciplined way. Others seem to attribute that rebuilding to a mysterious, unseen hand. Usually absent is a reasoned estimate, on the basis of what experience we have, of how people might actually be expected to behave.

Recently, physicians and other scientists have been making careful projections of the effects of nuclear war, and all raise severe doubts about general claims of recovery.

A 20-megaton bomb, for instance, if detonated over New York City, Chicago, or Leningrad, would vaporize, crush, incinerate, or burn to death almost every person within a radius of five or six miles from the center of the blast — two million people, perhaps. Within a radius of 20 miles, a million more or so would either die instantly or would suffer wounds from which they could not recover. If the bomb exploded on the ground, countless others who live miles away, far beyond the reach of the initial blast and searing heat wave, would be sentenced to a lingering death as radioactive fallout drifted quietly down into people, buildings, water and food supplies, and the earth itself.

But that picture, harsh as it seems, is inadequate even for a limited nuclear war and certainly for a full-scale one.

New York City, say, would be hit by many warheads, as would other cities, industrial centers, and military targets — hundreds of warheads, maybe thousands.

One has to try to imagine 100 million or more people dead, and lethal amounts of radioactivity scattered over huge areas.

And the survivors? Would they panic? Would they help one another? What would they feel and do?

In Hiroshima, survivors not only expected that they too would soon die, they had a sense that *everyone* was dying, that "the world is ending." Rather than panic, the scene was one of slow motion — of people moving gradually away from the center of the destruction, but dully and almost without purpose. They were, as one among them put it, "so broken and confused that they moved and behaved like automatons. . . . a people who walked in the realm of dreams." Some tried to do something to help others, but most felt themselves to be so much part of a dead world that, as another remembered, they were "not really alive."

The key to that vague behavior was a closing off of the mind so that no more horror could enter it. People witnessed the most grotesque forms of death and dying all around them but felt nothing. A profound blandness and insensitivity — a "paralysis of the mind" — seemed to take hold in everyone. People saw what was happening and were able to describe it later in sharp detail, but their minds, they said, were numbed.

Hiroshima and Nagasaki, however, can provide us with no more than a hint of what would happen in the event of nuclear war.

A single weapon today can have the power of 1,000 Hiroshima bombs, and we have to be able to imagine 1,000 of those exploding in the space of a few minutes. Moreover, in the case of Hiroshima and Nagasaki — and this is absolutely crucial — there was still a functioning outside world to provide help.

In a nuclear war, the process of psychic numbing may well be so extreme as to become irreversible.

Imagine the familiar landscape turning suddenly into a sea of destruction: everywhere smoldering banks of debris; everywhere the sights and sounds and smells of death. Imagine that the other survivors are wandering about with festering wounds, broken limbs, and bodies so badly burned that their features appear to be melting and their flesh is peeling away in great raw folds. Imagine — on the generous assumption that your children are alive at all — that you have no way of knowing whether the radiation they have been exposed to has already doomed them.

The suddenness and the sheer ferocity of such a scene would not give survivors any chance to mobilize the usual forms of psychological defense. The normal human response to mass death and profound horror is not rage or depression or panic or mourning or even fear: It is a kind of mental anesthetization that interferes with both judgment and compassion for other people.

In even minor disasters, the mind becomes immobilized, if only for a moment. But in the event of a nuclear attack, the immobilization may reach the point where the psyche is no longer connected to its own past and is, for all practical purposes, severed from the social forms from which it drew strength and a sense of humanity. The

Robert Jay Lifton, M.D., is author of "Death in Life: Survivors of Hiroshima," and "The Broken Connection: On Death and the Continuity of Life." Kai Erikson, professor of sociology at Yale University and editor of The Yale Review, is author of "Everything in Its Path: Destruction of Community in the Buffalo Creek Flood."

THE NEW YORK TIMES, MONDAY, MARCH 15, 1982

mind would, then, be shut down altogether.

The resulting scene might very well resemble what we usually can only imagine as science fiction. The landscape is almost moon-like, spare and quiet, and the survivors who root among the ruins seem to have lost contact with one another, not to mention the ability to form cooperating groups and to offer warmth and solace to people around them.

In every catastrophe for which we have adequate records, survivors emerge from the debris with the feeling that they are (to use the anthropologist Anthony Wallace's words) "naked and alone . . . in a terrifying wilderness of ruins."

In most cases — and this, too, is well-recorded in the literature of disaster — that sense of isolation quickly disappears with the realization that the rest of the world is still intact. The disaster, it turns out, is local, confined, bounded. Out there beyond the peripheries of the affected zone are other people — relatives, neighbors, countrymen — who bring blankets and warm coffee, medicines and ambulances. The larger human community is gathering its resources to attend to a wound on its flank, and survivors respond to the attention and the caring with the reassuring feeling that there is life beyond the ruins, after all. That sense of communion, that perception that the textures of social existence remain more or less whole, is a very important part of the healing that follows.

None of that will happen in nuclear war.

There will be no surrounding human community, no undamaged world out there to count on.

No one will come in to nurse the wounded or carry them off to hospitals. There will be no hospitals, no morphine, no antibiotics.

There will be no succor outside — no infusion of the vitality, the confidence in the continuity of life, that disaster victims have always needed so desperately.

Rather, survivors will remain in a deadened state, either alone or among others like themselves, largely without hope and vaguely aware that everyone and everything that once mattered to them has been destroyed.

Thus, survivors would be experiencing not only the most extreme forms of individual trauma imaginable but an equally severe form of collective trauma stemming from a rupture of the patterns of social existence.

Virtually no survivors will be able to enact that most fundamental of all human rituals, burying their own dead.

The bonds that link people in connecting groups will be badly torn, in most cases irreparably, and their behavior is likely to become muted and accompanied by suspiciousness and extremely primitive forms of thought and action.

Under these conditions, such simple tasks as acquiring food and maintaining shelter would remain formidable for weeks and months, even years. And the bands of survivors would be further reduced not only by starvation but also by continuing exposure to radiation and by virulent epidemics.

For those who manage to stay alive, the effects of radiation may interfere with their capacity to reproduce at all or their capacity to give birth to anything other than grossly deformed infants. But few indeed would have to face that prospect.

The question so often asked, "Would the survivors envy the dead?", may turn out to have a simple answer. No, they would be incapable of such feelings. They would not so much envy as, inwardly and outwardly, resemble the dead.

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Additional reading: Ground Zero, Nuclear War: What's In It For You? (pp.142-153) is "a fictionalized account of what might occur in a small American city remote from any strategic target in the aftermath of a full-scale nuclear attack on the United States...It has been constructed from a variety of things that we know something about." (p.142)

Related film: "The Last Epidemic." "Shows what the after-effects of a 20-megaton bomb would be on San Francisco. Uses footage from U.S. government films and footage from Hiroshima to drive home its point. Ends with an interview with a survivor from Hiroshima" (AFSC film listing). Available from the American Friends Service Committee or Physicians for Social Responsibility (see Resources section).

LESSON 4: LOOKING AT CIVIL DEFENSE

Recommended for:
Middle School
High School
Social Studies

As an introduction to civil defense, have your students read the handout Civil Defense: Dangerous Illusion or Necessary Precaution? Then you may begin, or continue, your dialogue about nuclear issues by examining your city or town's civil defense plans. After obtaining the plans (this is a good phone call for a student in your class to make), refer to the section on using community resources, and try to find speakers with opposing viewpoints on the civil defense issue to come to your classroom on successive days. Students could then research articles written in the past year about the civil defense debate and Congressional hearings on the topic at the federal level by using the Reader's Guide to Periodic Literature. (See "Especially Good Articles," p.126) for the annotations of articles that have appeared in the New York Times on civil defense. An excellent pamphlet called "Dangerous Deception: Civil Defense Planning in the Nuclear Age" is now available from SANE, 711 G Street, SE, Washington, D.C. 20003 for 15¢ per copy. Pamphlets arguing for civil defense are available from the Federal Emergency Management Agency, 500 C Street, SW, Department P, Donohue Building, Washington, D.C. 20472.

A good follow-up activity is to invite two speakers in -- one for and one against -- your town's civil defense plan. See the section on "Using Community Resources" for suggestions on how you might best do this.

Questions which could be explored are:

1. Why do proponents advocate a strong civil defense plan for the nation?

2. What is the Soviet plan like? Do the Soviet people think it will work?

3. What is a limited nuclear war? What would life be like after a limited war?

4. What plan is the Federal Emergency Management Agency (FEMA) advocating for civil defense of the nation?

5. Who are the "survivalists"? What are their beliefs about the possibilities of an effective civil defense?

Students could also examine the other duties of the Federal Emergency Management Agency. Is managing the disaster of a nuclear war in the same category as the other kinds of disasters and emergencies FEMA manages and plans for? Students might also want to look at the significance of the agency's title. The activities on euphemisms in the "Teaching About Dialogue" section relate directly to this. Finally, find out what percentage of the U.S. population FEMA thinks it can save in the event of a nuclear war with its civil defense plans. How many people does that translate into when you use actual numbers? How does that compare to the number of people who live in your city or town? How many people in the U.S. would die?

CIVIL DEFENSE: DANGEROUS ILLUSION OR NECESSARY PRECAUTION?

> If an enemy should threaten to attack the United States, you would not be alone. The entire Nation would be mobilizing to repulse the attack, destroy the enemy, and hold down our own loss of life. Much assistance would be available to you -- from local, State, and Federal governments, from the U.S. armed forces units in your area, and from your neighbors and fellow Americans. If an attack should come, many lives would be saved through effective emergency preparations and actions.
>
> --In Time of Emergency: A Citizen's Handbook on Nuclear Attack-Natural Disasters (Federal Emergency Management Agency, 1979)

> ...even if 80 percent of the population did survive the initial blast, the consequent radiation would kill millions more. Others would die from starvation or disease since transportation and communications would be shattered. Long-lasting radioactive pollution of water supplies and farm lands would destroy the nation's agricultural base, essential for the survival, let alone development, of society. The genetic damage from radiation would furthermore endanger the very possibility of future human survival.
>
> --"The Illusions of Civil Defense," editorial, America, March 20, 1982.

Certainly these two views on the effects of a nuclear war are completely at odds with one another. The first quote was from a pamphlet written by a Defense Department Agency charged with preparing citizens for evacuation; the second quote is part of an editorial responding to reports of these civil defense plans.

The argument in favor of civil defense -- planning for mass evacuation of American cities and building millions of fall-out shelters -- contends that careful preparation could save millions of American lives in the event of a nuclear attack.

In addition, proponents claim that civil defense is of strategic importance. The Soviets are taking steps to protect their civilian population in case of nuclear war. Unless the U.S. makes similar plans, it may be forced to back down from a face-to-face confrontation with the Soviets.

Those who oppose civil defense planning believe it fosters the dangerous illusion that the U.S. could survive a nuclear war if only it made proper preparations. (One study forecast a 1965 standard of living within six years of the war's end.) The opponents of civil defense believe the concept is used to allow the U.S. Government to deliberately risk waging nuclear war in order to extract concessions from the Soviet Union.

The estimated cost of Civil Defense --$4.5 billion over the next five years -- is less than 1% of total defense costs. The question raised in this section is: Should the U.S. pay that price in the hopes of saving millions of American lives -- or would the money just create a dangerous illusion?

Civil Defense: A Brief History

The idea that the U.S. may need to make special preparation in case of atomic attack was born in the 1950's. In 1949, the Soviets exploded their first atomic bomb, four years after Hiroshima. In 1953, the Soviet Union detonated its first hydrogen bomb, then only one year behind the U.S. In the 1950's, the Soviets were rumored to be building a vast fleet of intercontinental bombers capable of destroying American cities. Most Americans of school age during this period probably remember ducking under their desks in air raid drills, or standing silently in the halls, faces pressed against lockers. At the same time, Americans were encouraged to build air raid shelters in their homes. Nelson Rockefeller of New York was one of the nation's leading proponents of such shelters. Hoping to ride his concern for civil defense into the presidency, Governor Rockefeller had a bomb-proof state office building built underground in Albany. He also sat for hours in a model fall-out shelter with one side open for public viewing on a busy New York City street.

Rockefeller's views were partially accepted by President Kennedy, who at one time thought Rockefeller would be his opponent for the presidency. Kennedy made a predicted "missile gap" with the Soviets a popular campaign issue in his election victory over then Vice-President Richard Nixon in 1960. During the Berlin crisis of the next year, the new President proceeded with his advocacy of better civil defense as one way of convincing the Soviets that the U.S. would not back down. The budget request for fall-out shelters and other civil defense (CD) measures was raised from $104 million to $695 million. But as the Berlin crisis receded, Kennedy's advisors lost their zest for civil defense and made no overt protests as Congress whittled the CD budget down to $80 million. Among the many factors causing the Kennedy Administration to lose interest in the civil defense issue was the desire of extremists to obtain weapons to prevent neighbors from breaking into their shelters. Reinforcing this image of Americans firing at each other as they ran for cover were the recommendations made by think tanks such as the Rand organization. The Rand people believed it might be necessary to evacuate American cities two or three times during the 1970's in order to convince the Russians the U.S. meant business. For the Rand people, civil defense was one part of a nuclear weapons strategy that contemplated fighting limited nuclear wars for particular objectives.

They viewed nuclear wars as both "thinkable" and "winnable". The Kennedy Administration never embraced that concept, and ultimately refused to advocate a civil defense policy based on it.

Civil Defense in the 1970's and 1980's

With Jimmy Carter president, civil defense planning began again in the 1970's, under the auspices of the Department of Defense. By 1979, these functions were assumed by the Federal Emergency Management Agency (FEMA). Evacuation plans prepared by FEMA attracted a good deal of publicity as they were announced or leaked to the press. For instance, residents of Cambridge, Massachusetts, a city of 100,000, were expected to evacuate to Greenfield, Massachusetts, a distance of 100 miles away, much of it along a narrow, two-lane highway. The majority of the Boston metropolitan area residents, about a million people including Cambridge residents, would be traveling in about the same direction to pre-selected towns that were to receive populations four to six times their size. At these announced reception areas, civil defense booklets advised:

> When you reach a major community or town in your assigned reception county, proceed immediately to your assigned reception area.
>
> At the center you will register yourself and your family. Reception county officials will make every effort to assign you to a place to sleep, in a larger building or possibly with a private household that has volunteered to share their home.[3]

At these reception areas, evacuees would spend several weeks living in fall-out shelters until the worst of the radiation from an atomic attack had passed, and then return to their own communities.

Critics of civil defense plans argue that these books put out by the government say nothing about what the million residents of Boston and its suburbs would find upon returning to their homes. The civil defense booklet does not consider what would happen if the Soviets aimed missiles at evacuation sites such as Greenfield, Massachusetts. Critics also claim that the book assumes a two-day evacuation period, when 15-30 minutes' warning before a nuclear attack is more realistic. Finally, the strategic question is not answered in these books: What effect would a mass evacuation of American cities have on the Soviets? Would they assume we were preparing for a retaliatory strike? Would this lead them to strike first?

For these reasons, civil defense continues to be a controversial topic -- especially in Congress where President Reagan is fighting to get the $4.5 billion he feels is necessary to protect American lives in the event of a nuclear war.

LESSON 5: LITERATURE AND WRITING ON NUCLEAR ISSUES

Recommended for:
Middle School
High School
English

SHORT STORIES AND NOVELS

Three easy-to-read short stories:

1. Ray Bradbury's "The Flying Machine", from Golden Apples in the Sun. An ancient Chinese emperor witnesses the first human flight when one of his subjects soars overhead in a kite he has fashioned. The emperor has the man executed and the kite burned, because he fears that this thing of beauty may someday become an instrument of destruction in the hands of a man with "an evil face and an evil heart."

Albert Einstein said that the unleashed power of the atom has changed everything except our way of thinking. We have not lived long enough in this nuclear age for most of us to understand what he really meant, yet his words haunt us. What would he have thought of the ancient emperor's method of dealing with technological advances that threaten radical military change? Would the emperor have had Einstein executed?

In a New York Times Op-Ed article on February 11, 1982, "Against Trident II," Congressman Thomas J. Downey included a passage that illuminates the issue at the heart of the Bradbury story:

> Trident II is nurtured not by a Strangelovian desire to annihilate humanity but from the coincidence of two technological opportunities. For the first time, it is becoming possible to build a highly accurate submarine-launched ballistic missile, and for the first time, we have a submarine capable of launching a very heavy missile accurately. To a weapons developer, these unfulfilled opportunities create a vacuum that cannot be allowed to exist. It is our inability to control such mindless, amoral technological momentum that can spawn humanity's terminal blunder.

2. Donald Barthelme's short story, "The Game", is from his collection of stories, Unspeakable Practices, Unnatural Acts, and is also in a Scholastic Books paperback anthology text for high school students entitled Possibilities. It is a first-person narrative account of a man who has been on duty in the command capsule of a missile launch control center for 133 days. Normally men in his line of work are relieved after 24 hours. But there has been an oversight, he tells us, and this oversight has clearly cost him his sanity. Now all that he can think of is playing jacks, but the man who shares the capsule with him keeps the jacks and the little rubber ball locked in his attache case.

Barthelme's story depicts the routines inside the watermelon-shaped command capsules at our missile launching sites in the West. Partners are told to watch each other for signs of stress or other deficiency, as they do in this story, and they have keys which give them access to launch instructions.

Barthelme's fiction explores one of many possibilities for nuclear accident...and by extension, all of them. An excellent non-fiction companion reading to Barthelme's story would be a Newsweek article by Harvard Medical School professor, James E. Muller, "On Accidental Nuclear War." This is included in the Promoting Enduring Peace collection.

3. Our missile launchers are trained on the Soviets. But who are the Soviets? One good way to examine this question with your students is through Soviet literature. The short story "The Fate of Man" by Mikhail Sholokov is a good choice. It is the story of a Soviet soldier in World War II; he spends time in Nazi prison camps, and returns home to find his family has been killed in a bombing attack. The World War II setting -- when the U.S. and Soviet Union were allies fighting a common enemy -- may help your students bypass cold war distortion to reach an understanding of Soviets as people. The story will also help them understand the tremendous loss of life in the U.S.S.R. during World War II. Discussion might simply center on your students' reaction to the story, on the common experience of human love and loss and bravery and despair. Or it can involve questions about where we get information about the Soviet Union, what assumptions students make about Soviet life and values, and perhaps how those assumptions can be examined. Emphasis can be placed on the distinction, especially in this case, between people and government. An additional interesting question: what assumptions do Soviets make about us? (The story is available through Imported Publications, Inc., 320 West Ohio St., Chicago IL 60610, (312) 787-9017.) Stories, by Mikhail Sholokov, published by Progress Publishers in Moscow.

4. Other literature:

It would be impossible to list here all the pieces of literature that would afford good activities and discussion for your class. To mention a few, and the issues they raise:

Orwell's 1984: The ideas of doublethink and doublespeak contrasted with an analysis of present-day language used by governments.

Hersey's Hiroshima: The physical and emotional effects of atomic war.

Heller's Catch-22, Vonnegut's Slaughterhouse Five, Dalton Trumbo's Johnny's Got His Gun: For a discussion of conventional war, a subject of concern for draft-age students.

Vonnegut's Cat's Cradle: Living with the possibility of the annihilation of the human race by Ice-9.

Kennedy's Thirteen Days: A short account of the decision-making during the Cuban Missile Crisis.

Two less well-known but powerful books with a high interest level:

Judy Blume's Tiger Eyes: A 15-year-old girl tries to put her life together after her father is murdered in a robbery of his store. She is living temporarily with an aunt and uncle in Los Alamos, New Mexico, where her uncle works as a nuclear weapons researcher. She begins to connect her personal experience of violence in her father's death to her uncle's association with the threat of nuclear violence.

Ron Kovic's Born on the Fourth of July: The autobiography of a soldier in Viet Nam. The story is powerful and the language is rather strong.

One play which is not very well known:

John Somerville's Crisis: True Story About How the World Almost Ended: The process of deciding what to do during the Cuban Missile Crisis is re-enacted. The main characters are the President, U.N. Ambassador, etc. There is a sub-plot about the President's secretary and an intern who figure out what's going on and react to it. Order directly from author: 1426 Merrit Drive, El Cajon CA 92020. $1.00 a copy.

READING AND WRITING POETRY

Reading poetry can help people imagine what nuclear war means to them personally. Writing poetry can help them express their feelings by putting them in words and images and sharing them with others.

Sources of poetry related to nuclear war:

1. Village Voice of June 15, 1982 has three poems on the topic.

2. The Writing on the Wall: 108 American Poems of Protest edited by Walter Lowenfels (1969 Doubleday paperback) has a dozen poems on modern war.

3. Many modern poetry anthologies have these excellent poems:
   --Sandburg's "Smoke" (contradiction of sitting back while war goes on)
   --Henry Reed's "Naming of Parts" (beautiful day contrasted with a lesson about the parts of a rifle)
   --Don Gordon's "The Kimono" (for women of Hiroshima)
   --Donald Justice's "Counting the Mad" (being called crazy for protesting what is wrong)
   --Felix Pollak's "Speaking: The Hero" (on a reluctant soldier)

Poetry writing ideas: Poetry writing about nuclear arms must start with some kind of gripping experience which will make the issue less abstract and more real.

--Read a page from John Hershey's Hiroshima -- the experience of particular Japanese people on the day of the A-Bomb.
--Read an account of Hiroshima survivors (Progressive magazine, August, 1981)
--Show a movie if you can
--Show students photographs of nuclear weaponry (Life magazine, February, 1982) or Hiroshima or other war photographs
--Read "A Survivor's Story" in the "Children of the A-Bomb" exercise.
--Use Unforgettable Fire: Pictures Drawn by Atomic Bomb Survivors by the Japan Broadcasting Company. Pantheon, NY.

Writing ideas:

1. Most past wars built up slowly. Nuclear war, however, could start with a "bolt out of the blue." Both the U.S. and the U.S.S.R. could be largely destroyed in a matter of minutes. Write a poem that is a simple list of what is or could be going on in one minute. Here is a sample "right now" and "six second" poem by two students from Watertown (MA) High School.

At This Moment
A Young girl is blinking her eyes
A pigeon is dropping white onto a car window
Someone is getting stabbed
But nobody cares about them.

At This Moment
A baby is burping
An old man is taking out his dentures
A Russian is setting his first foot in Afghanistan
But nobody cares about them.

--Peter Roux

Six Seconds
Believe it or not
It's a long period of time
A jet can fly a whole mile
A baby can open its eyes
A seed can start to grow
A life can expire.
--Author Unknown

2. Force Fit Poems. Brainstorm with students words which come to mind when they think about nuclear war, and put them on the board. Ideas: mushroom cloud, fear, bomb, death, peace, radiation, pushing the button, Hiroshima, etc. Then brainstorm a list of words which describe everyday objects. Ideas: grass, clock, wood, wind, sandpaper, stone, garden, motorcycle. Put all of the words on small pieces of paper, and divide them into two piles. Have students choose a slip of paper from each of the two piles, then write a short comparison poem that shows some kind of connection between their two words. Student models:

Death and Mud
Death, my own,
is like mud in my hands,
I try to hold onto it,
but the tighter I close my fist
the more I lose.
--Terri Urciuolo

Life and Crackerjacks
Life is like a
box of crackerjacks --
what'd you get?
--author unknown

Death and Wind
Death is like the wind
that blows upon you
when you are alone
and unsuspecting.
--Danielle Pettijohn

3. Write an acrostic poem: write one of these words DOWN the page. Then use each letter as the beginning of a word or phrase that relates to that word. Example:

F ollowing
O ur President to bed
O r to the White House,
T he football waits to be opened, the
B utton waits to be pushed
A nd the world waits.
L et the football wait forever,
L et the world live.
--Barbara Beckwith (Teacher, Watertown, MA High School)

A rguing about
N othing.
G etting nowhere.
E ventually hurting.
R emember the reason?
--Antonette DiVasta

4. Write a poem that contrasts your present life and a nuclear war, or your life compared to army life, or a threatening world compared to a peaceful one. (Sandburg's "Smoke", Reed's "Naming of Parts" and Pollak's "Speaking: The Hero" are all good models of contrast poems.) Student model:

the world of happiness
the world of joy
the world of bombs
the world of guns
is another world
so far far away
will it stay far away
until it goes away?
--Sheila Precopio

5. Have students call our specific fears, questions, wonderings about the nuclear arms race issue. Write phrases they use on the board. Have students write poems (rhymed or unrhymed) on one of these words. Student models:

Fear
When I go to the beach
It's always a time
For thinking of fears
And how your life
Has gone past you
So many crystals of sand,
So many thoughts of fear.
--Jenny Gernes

Death
To be gone
to have no identity
to have been
to be lost where no one can find you
in a different place
no feelings
just BLANK
everyone vanished
everything vanished
no colors
no smells
no sunrises or sunsets
no moons or rainbows
just BLANK.
--Julie Edwards

Have students imagine the world as they would like it to be. Create a picture of that world in a poem. (See exercise on "Twenty Years Hence: 2003" on p. 85.)

6. Have students keep journals to record private reactions to readings, class discussions, etc. See p.83 under "Complex Peer Relations" for another note on journals.

LESSON 6: COMPARING THE COLD WAR ERA WITH THE 1980's

Recommended for:
Middle School
High School
English
Social Studies

For a longer project, have students research the history of public concern about the arms race and the threat of nuclear war by looking specifically at the decade between the Korean War and Vietnam, 1955-1965. The project has two parts -- library research, and an oral history project.

Library research: Have students use the library to look through:
- --old newspapers
- --books published during those years on the subject
- --both left and right wing journals (The Sept./Oct. 1982 issue of Mother Jones contains a first-person recollection entitled "Cloakroom Nightmares.")
- --popular magazines of the time (particularly Life magazine)
- --government newsreels and films (if you have access to these)

Ask them to focus on the following questions:
1. How strong was the disarmament movement during that time?
2. What were the concerns of the people who were involved?
3. What were some of the counter-arguments?
4. Why did the concern seem to die out?
5. What were the terms and phrases, and who were the key people, mentioned most often?

Students might need some guide words to look for:

--commies	--fall-out shelters	--cold war
--strontium-90	--atom bomb, A-Bomb	--atomic war
--radioactive fall-out	--Rosenberg trials	--McCarthyism
--above-ground testing	--Cuban missile crisis	--red-baiting

Remember that you are asking students to use primary as well as secondary sources, and that many of the primary sources will be on microfilm. Be sure students know how to use a microfilm reader, and encourage them to bring photocopies of their sources back with them. You can then collect these in a classroom file for others to use.

Oral History: Have students talk with their parents and other adults who grew up during the 1950's and early 60's in order to gather stories, feelings, and opinions from them about what they remember about the nuclear threat.

If students are going to collect oral histories, they may need some preparation:

1. Learning to use a tape recorder.
2. Drawing up a "content outline" (i.e., an outline of subjects they want to make sure they cover), from which students can brainstorm interview questions. The library research students have already done will be useful for doing this.
3. Brainstorming good questions. Students need to learn to phrase open-ended questions. Remind students that questions that can be answered with a simple "yes" or "no" do not elicit the stories, feelings, opinions, and recollections that make oral histories so interesting.

Follow-up:

Use all of the information gathered for student discussions, presentations, or written papers. Be sure to leave time at the end of each part for students to share what they've learned in some form. At the conclusion of the project, ask students the following questions:

1. Why do you think the concern about the threat of nuclear war has surfaced again?
2. What do you think will happen as a result of this renewed interest?
3. What can we learn from the history of the disarmament movement?
4. What are the similarities and differences between the concerns prevalent in the time period we've studied, and the concerns expressed today?
5. Do you think that history repeats itself, and that we inevitably get "trapped in historical memories" -- or can we as individuals affect the course of history?

Finally, students could also compare their own feelings about the Soviet Union, nuclear war, the bomb, etc. with their parents' feelings and points of view.

LESSON 7: LETTING THE SOVIETS ENTER THE DIALOGUE

Recommended for:
High School
Middle School
English
World History
Art
Home Economics, et al.

David, Age 17: "Nowadays, all I hear is 'The Russians are bad, you don't like them. They're liars and warmongers.' I don't really know the basis for all this hatred and fear. But since I was brought up under that philosophy, it's hard for me to break it."

Professor George Kennan, former ambassador to the Soviet Union: "...the view of the Soviet Union that prevails today in large portions of our governmental and journalistic establishments is so extreme, so subjective, so far removed from what any sober scrutiny of external reality would reveal, that it is not only ineffective but dangerous as a guide to political action..."

This section is an attempt to provide teachers and students with some possible responses to Professor Kennan's challenge. It is an attempt to let the Soviet Union enter our days of dialogue by examining material directly from the Soviet Union on many problems which confront us both. In taking the trouble to acknowledge Soviet perspectives as well as our own, we can create an alternative to reflexive fear, suspicion, and distrust, an alternative which is a necessity if our days of dialogue are to lead eventually to peace.

SPECIAL CONSIDERATIONS FOR TEACHERS

In preparing units on the Soviets for students, teachers will often be confronted by a number of unusual problems.

a. In many instances the teachers will find themselves initially uninformed and suffering from prejudices similar to their students. This means that initial preparation time will be longer because teachers will have to work through material which may challenge their own assumptions. However, the difficulties a teacher confronts can be a useful perspective to share later with students.

b. Studying materials from the Soviet Union often raises fears about communism in colleagues, administrators, and parents. In such instances one's efforts to understand the Soviets may appear as a frightening, lonely and thankless task. Contact with other teachers who are similarly concerned can be important.

c. Teachers may find that reluctance to learning about the Soviets will manifest itself in many disguised forms. As an example, a student may insist that anything written by the Soviet government can't be trusted because it is propaganda and doesn't represent the opinion of the people. In other instances a student will object that he cannot trust the translation, not because he is concerned with accuracy, but only because he wants to reject it as invalid. In general, challenging our stereotypes is more uncomfortable than maintaining our familiar distrust. Pessimism allows one to conclude that nothing can be done, thereby avoiding the difficulty of taking action. Teachers can help students to understand the underlying motivations for their resistance by asking the right questions in a supportive way.

d. Throughout this section, various works from the Soviet Union are cited. These materials are all available in the United States through Imported Publications, Inc., 320 West Ohio Street, Chicago IL 60610. (312) 787-9017. Each year, Imported Publications issues a catalogue listing books, periodicals, and newspapers available in English from the Soviet Union. The materials span a wide range, including sports, literature, art, natural sciences, technical sciences, social sciences, and children's literature.

e. One of the main objectives of this section is to give students direct access to Soviet views of the Soviet Union and the world. For this reason it is important for teachers and students to attend to sources. A number of the references that are suggested in this unit are not sources directly from the Soviet Union but are Western interpretations of Soviet views. While these sources can give us valuable information, it is important for students to realize when they are and when they are not reading actual Soviet material.

ACTIVITIES:

LOOKING AT HOW WE LOOK AT THE SOVIET UNION

The purpose of this activity is to help students start to recognize the nature of our perceptions and assumptions about the Soviet Union.

a. "What images, thoughts, or feelings come to your mind when you think of the Soviet Union or Russia?" Generate a list of the students' responses to this question. Review the list indicating into what categories the students' impressions fall -- political, military, historical, cultural, economic... What categories do students seem to omit when thinking about the Soviet Union? How are these impressions likely to influence a person's attitude toward the prevention of nuclear war?

b. "What are the sources of these impressions?" In general most Americans are relying on four sources for their ideas about the Soviet Union: correspondents working for the mass media, academic institutions specializing in Soviet Studies, Soviet citizens living in the U.S who have emigrated from their homeland, and U.S. governmental bodies such as the Defense Department.

c. "How valid are these sources?" With what biases is each particular source likely to approach the Soviet Union? Against what can these sources be tested?

d. "How do Soviet citizens view us?" How do they view themselves? The world?

The rest of the curriculum is directed toward helping student and teacher answer the questions posed in (c) and (d).

COMPARING AMERICAN AND SOVIET REPORTING ON CONTROVERSIAL ISSUES

The Nuclear Arms Race

In 1981, the Pentagon issued a pamphlet entitled "Soviet Military Power" (available through the U.S. Government Printing Office). In response, the following year the Soviets issued a booklet entitled "Whence the Threat to Peace." After reviewing the Pentagon document, ask the students to compare it with the Soviet booklet. This exercise can be quite useful in stimulating students to become more critical of what they are being told and can help them begin to see that the same situation may look quite different from the other side.

In 1982, the American Security Council Foundation, a private pro-military organization which supports the current U.S. arms build-up, issued a film entitled "Countdown for America." While no comparable Soviet film is available, the Soviet Scientific Research Council of Peace and Disarmament has issued a lengthy booklet in question and answer format entitled "How to Avoid the Threat to Europe." Many questions that appear in this booklet are raised by the American Security Council film, such as the nuclear balance, the effect of a freeze, medium range weapons, and security in Europe. Again an opportunity is provided for students to evaluate the argument from both sides by comparing these two documents.

For advanced students wishing to examine in more depth Soviet views on the arms race, a number of books and journals have been issued in recent years by the Soviets. As an example of each we would suggest Peace and Disarmament: Academic Studies, a collection of essays by leading Soviet academicians. Also the quarterly journal, Social Science, issued by the U.S.S.R. Academy of Sciences, contains numerous articles on the struggle for peace.

Current Events

For purposes of comparison with Newsweek or Time, or U.S. News and World Report, Soviet weekly magazines which appear in both Russian and English editions can be quite helpful. Have students compare the reporting of particular events that appear in U.S. news magazines with that of Soviet weeklies New Times or Moscow News. One particular feature of interest in New Times is a regular column called "Taking Up the Point." In this column each week a Soviet expert gives a detailed answer to a question from a Western reader about a controversial aspect of Soviet society or policy.

The wide-ranging questions include such topics as the role of the Communist Party in Soviet society, the problems of human rights, Soviet aid to Cuba, the problems of youth in the West and in the U.S.S.R., the proper handling of juvenile delinquency, efficiency of workers in socialist and capitalist societies, women's rights, and national minorities. Since these magazines appear in Russian as well as foreign languages and are widely read in the Soviet Union, they also afford the student an excellent opportunity to examine what Soviet citizens are learning about current events.

Additional Resources: The Soviet Press

Examination of articles published in Soviet newspapers and periodicals is an excellent way to learn about Soviet life and Soviet thinking on contemporary issues. Since 1949, The Current Digest of the Soviet Press has published a weekly English-language overview of the Soviet press entitled The Current Digest. The translations and abstracts in The Current Digest are a selection of articles from over 80 Soviet newspapers and periodicals on a wide variety of topics including politics, economics, literature and arts, education, family life, medicine and natural resources. Recently, they have published two outstanding compendiums of selected articles: The USSR Today: Perspectives from the Soviet Press (1977 through 1981), and Soviet Foreign Policy Reports and Commentaries from the Soviet Press (1979 through 1982), in which a wide range of specific issues are covered, including the arms race, Soviet-American relations, Afghanistan, Poland, and relations with the Middle East and Europe. Examination of what Soviets are reporting and what Soviet citizens are learning about contemporary issues is valuable in itself, but students can also be asked to compare a Soviet article with an article from the American press which either reports on the same subject/event or on the same problem as it exists in the United States. Soviet articles which discuss social problems such as women's rights, family life, alcoholism and crime can be of particular interest for high school students. To order any of the above mentioned publications write to: The Current Digest of the Soviet Press, American Association for the Advancement of Slavic Studies, 1314 Kinnear Road, Columbus, OH 43212.

THE LAND AND THE PEOPLE OF THE SOVIET UNION

Since there is a tendency to confine our views of the Soviet Union to politics and the military, it can be quite enlightening for students to learn about the diversity of Soviet culture, people, resources, traditions, literature, arts, etc... There are many ways in which classes throughout the school can discuss the Soviet people and culture. For example, a cooking class could prepare foods native to different Soviet republics, a music class could study Soviet and Russian composers, a math class could learn about the life and contributions of famous Soviet and Russian mathematicians, an art class could study Russian Icon painting, a dance class could learn folk dances particular to certain republics and/or invite a folk dance group in to perform for the school. The following activities and resources are examples of starting points for enriching students' knowledge of the land and people of the Soviet Union.

The Fifteen Republics

The Soviet Union is more than Russia. Assign each student one of the 15 republics and guide them through the following steps:

1. Draw an outline of the republic on a blank piece of paper so that its borders extend to the edges of the paper.

2. Research basic characteristics of the republic, i.e., population, chief industries, ethnicity, language, writers and artists, religion, natural resources, the capital, bordering countries and/or republics. (Reference books such as The Statesman's Yearbook provide such information.)

3. Write the information about the republic within the borders of the republic which you drew. Write clearly so that it can be reproduced!

4. Share your research findings with the class. Copies of the students' work should be distributed so that each student has a sheet on each of the republics. It can also be very useful to provide information about the nation as a whole to illustrate the total expanse, diversity and unity of the USSR. This can be assigned to a student(s) or presented by the teacher.

As a follow-up to this activity, or as an activity in itself, excellent slide shows and photographic books are available to help students visualize the Soviet land and people.

Journey Across Russia: The Soviet Union Today. Published by National Geographic Society. Excellent photographs and text. Also available through National Geographic is a film strip program by the same title. (100 photographs and two cassettes, 1977.)

Russia: The Land and the People of the Soviet Union. Published by Harry Abrams, Inc. This elegant, full-size book is a collection of photographs taken by Dieter Blum during nine trips to the Soviet Union from 1977 to 1979 with an accompanying text by Nikolai Nikoaevich Mikhailov. It documents the land, natural resources, the people arts and festivities, industry, agriculture and science.

The Cambridge Encyclopedia of Russia and the Soviet Union. Edited by A. Brown and others. Cambridge University Press. This is a very comprehensive reference book on the USSR. It is an excellent source of information rather than for photographic profiles.

For those in the Boston area, slide lectures are available from the Soviet and East European Language and Area Center, Harvard University, 1737 Cambridge Street, Cambridge, MA 02138. Although they are available for free, they must be picked up and dropped off in person. (Other universities with area study centers make their resources available to teachers and can be contacted for information about visual aids.) Each of the slide lectures listed below consists of slides, a sheet which identifies each slide, and where indicated, a typescript "lecture".

Lands and Peoples of the USSR. 80 slides, typescript.

The Form of the Russian Church. 22 slides, typescript.

Russian Folk Art. 77 slides, detailed description of each slide.

Moscow. 20 slides and typescript.

St. Petersburg. 20 slides and typescript.

Samarkand/Bukhara. 20 slides and typescript.

Soviet Humor from Krokodil. 24 slides, detailed explanation of each cartoon.

Russian Street Signs. 130 slides (for the Russian language teacher).

On the Rim of the Arctic: The Khanty. 53 slides, detailed description.

The Icon and the Russian Church. 28 slides, transcript.

Soviet Literature

In the last ten years there has been a great expansion in the amount of Soviet literature which has been translated into English. As a result, there is a rich selection of literature from all of the Soviet republics available to American readers. In the Soviet Union literature receives serious attention not only as a reflection of reality but also as a tool for developing that reality. Reading Soviet novels, short stories, poetry, and plays is a way to explore closely the expressions of the Soviet mind on the dilemmas and joys which confront humankind. The following list of literature is a selection of some of the works available from Imported Publications.

Novels and Short Stories

Aitmatov, Ch., Tales of the Mountains and Steppe. Three short stories by the well known Kirghiz author. Of particular excellence is the story, "Farewell, Gyulsary."

Bochkarev, Y., Soviet Russian Stories of the 1960's and the 1970's. An anthology compiled from stories that have appeared in the magazine Soviet Literature.

Gorky, M., Mother. A classic novel about the life of a working class family in czarist times.

Ketlinskaya, V., Fortitude. A tale of settling the Soviet Far East -- about the difficulty of choosing one's path in life and the potency of friendship.

Ostrovsky, N., How the Steel was Tempered. A novel of youth, love and struggle in the Komsomol of the 1920's.

Panova, V., Selected Works. Four works by a winner of three state prizes, including her best selling first novel, The Train, and her story "Seryozha" which won an award for its 1960's film version.

Sartakov, S., The Philosophers' Stone. This is the most recent novel of a well-known writer and state prize winner from Siberia. Story takes place in Siberia during the civil war of the 1920's.

Sholokhov, M., Stories. Includes the excellent short story, "Fate of a Man."

POETRY

Altasen, J., Immortality. Collection of verse by front line poets who died on the battlefields during WW II.

Blok, A., Selected Poems: Alexander Blok. Collection of poems spanning the years from 1898 to 1921.

Lazarev, L., Let the Living Remember. Anthology.

Narovchatov, S., Selected Verse. 32 years of poetry, selected from the works of the editor-in-chief of a Soviet literary journal. Includes autobiographical introduction.

LITERARY CRITICISM

Gorky, M., On Literature. Includes articles on the art of writing, literary portraits of Chekhov, Tolstoy and Yesenin, and Gorky's address to the first All-Union Congress of Soviet Writers in 1934.

Zelinsky, K., Soviet Literature: Problems and People. An account of modern Soviet literature, its historical background, its stages of development and key personalities in its growth.

DIRECT PERSONAL CONTACT WITH SOVIETS

Despite international friction, Soviet cooperation with American organizations and individuals seeking to establish citizen exchanges is excellent. The following suggestions are various ways one can participate in direct, personal dialogue with Soviet citizens. It is through such communication that we are afforded invaluable opportunities to humanize our relations with the Soviets.

a. Organizing a school trip to the Soviet Union: At first glance, a trip to the Soviet Union may seem like an extravagant or difficult tour to arrange within your school. However, there is a growing number of teachers who have successfully organized and led group tours to the Soviet Union for their school community. National ESR can be contacted for names of people who have organized school trips to the Soviet Union and can help you to prepare students, and to arrange visits to Soviet schools, youth organizations, peace committees, etc. The first word of advice is to start planning the trip well in advance.

b. International Workcamps: The underlying principle of international workcamps is to provide young people with a concrete and personal experience of international cooperation. For two to three weeks over the summer months, individuals from countries throughout the world convene to contribute their efforts toward a community work project in the host country. Workcamps began in Europe after WW II and now there are over 400 such camps each year throughout the world. Volunteers for Peace, Inc. is a non-profit organization which coordinates the exchange of workcamp volunteers with organizations in 21 countries, including the USSR, by sending American volunteers to workcamps abroad and by receiving foreign and American volunteers for workcamps organized in New England. For more information contact Volunteers for Peace, Inc., Belmont VT 05730. Telephone (802) 259-2759.

c. Participating in pre-Arranged Travel Programs: Since 1962 the Citizens Exchange Council has worked to increase understanding between the Soviet Union and the United States by organizing travel programs to the USSR and by hosting Soviets in the United States. Each of their programs is tailored to a particular interest or profession such as education, fine arts, popular culture, journalism, cross-country skiing or chess. For more information contact: Citizens Exchange Council, 18 East 41st Street, New York, NY 10017. Telephone (212) 889-7960.

d. Arranging a class field trip to meet Soviets: Depending on the location of your school, it may be possible to take your students to the Soviet Embassy in Washington, D.C. or to the Soviet Mission to the United Nations in New York City. Such a visit can provide students with an opportunity to discuss the policies and perspectives of the Soviet government. It may also be possible to arrange for Soviets from the Embassy or UN Mission to visit your school. To make such arrangements write to: Soviet Embassy, 1706 18th Street, NW, Washington D.C. or Soviet Mission to U.N., 136 East 67th Street, New York NY 10021. If these are not accessible to you, contact your local universities to see if arrangements can be made with visiting students from the Soviet Union.

e. Soviet Pen Pals: The exchange of letters is another channel in which students and teachers can communicate directly with Soviet citizens. The International Friendship League has names of Soviet students who want to be matched with Americans. Contact Stephan Scott, International Friendship League, 22 Batterymarch Street, Boston, MA 02190. Telephone (617) 523-4223. The Committee of Soviet Women and the Committee of Youth Organizations have also expressed interest in establishing American pen pals. Write directly to: Committee of Soviet Women, 6, Nemirovitch-Dantchenko Street, Moscow, USSR or Committee for Youth Organizations, 7/8 Bogdan Khemelnitsky Street, Moscow, USSR.

PUBLICATIONS ON THE SOVIET UNION'S MILITARY AND FOREIGN POLICY

While a number of U.S. publishers have books for students on Communism and the Soviet Union, few have materials available that focus on the Soviet Union's foreign and military policy. The following are a brief selection of materials that present a balanced viewpoint.

Nuclear Strategy and Arms Control: Challenges for U.S. Policy. By Stanley R. Sloan and Robert C. Gray. Pamphlet published by Foreign Policy Associates, 205 Lexington Avenue, New York, NY 10016.

What About the Russians? by Sanford Gottlieb. 1982. Published by S.T.O.P. Nuclear War, Box 232, Northfield, MA 01360.

LESSON 8: DEBATING TWO POINTS OF VIEW ON NUCLEAR ARMS

Recommended for:
Middle School
High School
Social Studies

1. Have your class brainstorm their own list of arguments on both sides of the nuclear arms issue. Write all their arguments down in two columns on the board or a large piece of paper. You'll be surprised how many arguments they can think of once they get going, although they may not have specific facts or names. Give them topic ideas: jobs, who's ahead, civil defense, etc.

2. Give students an article that has arguments on both sides (Time or Newsweek are good) and have them read to find new arguments.

3. Have students collect more arguments from magazines on both sides of the issue. Magazines with a generally pro-nuclear build-up stand:

   National Review
   Reader's Digest
   Conservative Digest
   U.S. News and World Report
   Commentary

   Magazines with generally anti-nuclear build-up stand:

   The Nation
   Mother Jones (the Sept./Oct. 1982 issue is a special disarmament issue)
   Progressive
   Environment
   Bulletin of Atomic Scientists

5. After students have made their own class list of arguments, give them copies of our arguments list. Have students note which arguments they didn't think of.

6. Have each student underline those arguments on both sides which they think are strongest.

7. Each student can choose one argument and look in magazines, news articles, or books for facts that would prove or disprove it.

8. Use the list as a basis for a debate.

9. Have students show the list to three other people and have them mark the strongest arguments on BOTH sides. Have students share and analyze their data.

Note: the arguments list that follows has been gleaned from newspaper and magazine articles. It is not meant to represent the arguments in any comprehensive way, but is meant to be a good start for further research.

10. While this activity polarizes the views into two sides, it is important to help students see that there are many more sides than two and that people have proposed many divergent solutions to the arms race. See the "Solutions, Treaties, and Verification Issues" of the study guide in Appendix A for more information on these points of view.

    Another way to structure this activity is to divide the class into teams that represent particular interest groups such as environmentalists, defense planners, business leaders, religious organizations, representatives of third world countries, and physicians. Have each group present its arguments from that perspective.

USSR is ahead of us in nuclear weapons, "a definite margin of superiority," said President Reagan. There is a window of vulnerability because USSR has more missiles, heavier warheads (more megatonnage), and spends more than we do on their military.

USA and USSR have a rough parity of arms. USSR has more missiles but we have more warheads on ours. Their warheads have more explosive power but ours are more accurate. They have more land-based missiles but we chose to put more missiles on submarines which are invulnerable to attack. If you include allies, US and NATO have spent more than USSR plus Warsaw Pact. They've been spending more just to catch up to us. We are equal now, or even a little ahead of them.

Many other countries will soon have nuclear arms, some of them unstable countries. USA must have superior weapons in order to limit the proliferation of weapons and to control their use.

Other countries will follow the lead of USA restraints on nuclear weapons, especially if both the USA and USSR cut back. USA and USSR can refuse economic and nuclear technology aid as a way to pressure other countries NOT to go into nuclear weaponry.

Nuclear technology is here to stay, so we will just have to live with it. You can't turn back the clock and reject new technical advances.

Just because a technological advance exists doesn't mean we have to use it. Nerve gas was used in World War I but then outlawed internationally and not used in World War II. Germ and chemical warfare were also outlawed.

People who want a freeze are being to emotional, hysterical. No one wants a war and everyone knows it would be horrible. But we must calmly face the risk and not panic.

There's nothing wrong with emotion if it is based on a clear danger. Emotion can be a stimulus to taking action. To calmly continue the arms build-up is to deny real danger.

There has always been war. It is a part of human nature. It is unrealistic to try to get rid of it.

Just because there has always been war, does not mean there must always be one. We can become more civilized. We can negotiate instead of fight out our conflicts. Slavery is now considered unnatural but abolitionists were once considered idealistic for wanting to get rid of a "natural part of life."

USSR has a geopolitical advantage in Europe. It can easily invade NATO countries where it is.

USSR is at a geopolitical disadvantage in Europe. Its border is too long to defend against attack. It is encircled by NATO bases in England, France, Greece, Turkey, and Japan.

USSR is more willing to go to war than we are. The government is more willing to sacrifice its people than we are.

Russia has experienced invasion by outside forces (which USA never has) three times in this century: World War I, the German Nazi invasion in World War II, and in 1920. In World War II, 20 million Russians died and 73,000 villages were destroyed. It never wants another war and would not risk one easily. It sees the plan to put nuclear weapons in NATO country Germany as arming its former enemy.

The USSR is aggressive and will try to take over other countries if we don't have enough nuclear weapons to deter them. They have already taken over Hungary, Czechoslovakia, Afghanistan, and Poland.

The USSR is no more aggressive than USA. Both countries have taken military action to insure countries close by will not threaten them. USA has invaded Cuba and Vietnam. CIA has engineered coups in Iran, Chile, and Guatemala.

The best defense is a good offense. Building a strong US weapons system is the best guarantee of peace, since the USSR then won't dare go to war. If the USSR is ahead, it will be more likely to start a war.

Nuclear weapons make us less, not more secure. The weapons build-up makes both countries feel threatened and more likely to attack each other first. It is time to stop the race now, and start cutting back. Even with cutbacks, each has enough weapons to deter the other from war.

Without nuclear weapons, our country will have to reintroduce the draft, triple our armed forces, and put the country's economy on a wartime footing, according to former Secretary of State Alexander Haig.

America's volunteer, professional army and non-nuclear conventional weapons are all that is needed to fight USSR invasions of a country we are obliged by treaty to defend.

You can't trust the Russians. They secretly tried to put missiles in Cuba. They used chemical warfare in Cambodia and Afghanistan and still deny it. They might be cheating on present treaties and they could cheat on future treaties unless there are on-site inspections.

There is no proof that USSR has cheated on any treaty, except for the prohibition against chemical warfare, which USA violated too by using Agent Orange and Napalm in Vietnam. Our spy satellites and radar can spot any new missiles. Small-scale cheating would be insignificant.

People who say the world will end if there were a nuclear war are alarmists. The ecology of the earth, for instance, could return to normal in 20 years after a nuclear war.

There is no way to know if the earth would survive multiple detonations which might destroy the ozone layer that protects people, plants, and animals from the sun's rays. All people and animals might go blind if the ozone layer is destroyed. We have no right to endanger the entire species and earth.

Even if the Russian people want to end the nuclear arms race with USA, their totalitarian government won't listen to them. USSR allows no freedom of the press or demonstrations. They arrest dissenters. It is useless to think that citizens who want disarmament can influence their leaders.

The USSR may prohibit direct protest but does know its people are discontent when they strike (as in Poland) for better living conditions, or form illegal peace groups (as in Russia). Also, the Communist Party does have debates and voting; the country is not completely totalitarian.

There are adequate safeguards to insure there will be no accidental nuclear war. Nuclear bombs have existed for 30 years now and there has never been a single accidental major missile firing yet. The USSR/USA Hotline will prevent any accidental firing to turn into an unintentional all-out war.

Nuclear war could easily start because of human error, malfunctioning, or poor communication. There have been several false alarms already. (A new radar system mistook the rising of the moon for a Soviet attack in the mid-60's. Practice tape left on computer announced a Soviet attack in 1979.) The next error could start a nuclear war.

No one person, the President included, can send missiles on their way simply by pushing a button; several high officials are involved in the procedure.

An unstable President of one of the nuclear powers could start a war in time of stress. Terrorists could steal a bomb and threaten the world with it.

USSR's no first strike policy announcement is just talk. If they sat down to negotiate on weapons, their negotiations would be all talk too. They will just use negotiations for self-serving propaganda.

The USSR is willing to negotiate; it has already signed a dozen treaties and has not violated any of them including SALT II which the USA never ratified. USSR has agreed in these treaties not to put nuclear weapons or wastes in seabeds, outer space or in the Antarctic, and not to test bombs in the atmosphere or large bombs underground. They have already announced a no-first-strike policy which we have refused to do.

We have restrained ourselves for a decade while the USSR caught up. We were foolish to do so, like the British who didn't believe the Germans were aggressive and so did not build up their own military forces before World War II. Their policy of appeasement caused many deaths.

America has escalated the arms race at every point: we introduced the first atomic bomb, hydrogen bomb, nuclear subs, ICBM's, multiple warheads.

A nuclear war is survivable. If civil defense plans are fully implemented and US deaths could be kept at 20 million, we could recover from a nuclear exchange. If our command and control systems and a percentage of our industry survived, we could prevail. If USSR has better civil defense than we do, however, it will be more willing to risk war. We must think the unthinkable and prepare ourselves for the possibility of war.

Civil defense and survivability are dangerous illusions. The death, devastation and suffering would be so great that the living would envy the dead. Civil defense plans could not be implemented. They just make us think a nuclear war is acceptable and risk starting one.

Better Dead than Red. It is better to risk nuclear war than to risk the possibility that USSR might invade us and force us to become Communists. USSR is trying to take over the world.

The USSR accepts the USA as a fact. It does not want to invade us. It just wants to be able to exist itself.

Nuclear war won't necessarily mean all-out war. Limited nuclear war is possible. A war in the European theatre might not spread to the USA. We could have a protracted war (long-term) that would only gradually escalate, giving time for negotiations to go on.

Limited and protracted wars are dangerous illusions. It is more realistic to realize any nuclear exchange would escalate immediately into all-out war destroying both countries completely.

The weapons industry provides a lot of jobs for people. An arms freeze would cause a lot of unemployment across the country.

America needs butter, not guns. The government is cutting funds for things people need (health, education, welfare) and putting them all into arms. The arms industry is inflationary, and it drains our best brains: 50% of our scientists and engineers have jobs in the defense industry. Meanwhile, Japan's technology is ahead and the USA has the lowest productivity of the industrialized nations. Weapons industry jobs are for highly educated and specialized technicians, not for production workers. A domestic economy provides more jobs than a defense economy.

Demonstrations against nuclear weapons weakens USA's negotiating power. USSR sees our citizens pushing our government for disarmament and will take advantage of that at the bargaining table.

The basis of negotiations should be the danger of mutual annihilation, so citizen pressures don't weaken USA's position but strengthen the likelihood of safety for both Russians and Americans.

USA has sworn to protect our NATO allies. NATO's conventional forces in Europe are inferior to the Warsaw Pact's without nuclear arms to back them up. USSR forces could easily invade Europe by land without the "nuclear deterrent".

USSR isn't interested in invading NATO countries, even without a nuclear threat. They would meet too much internal and external opposition -- they are surrounded by NATO airbases. The other countries they invaded (Poland, Afghanistan, Czechoslovakia) already had communist governments in place.

Russia listens only to force. They backed out of putting nuclear missiles in Cuba only when we threatened them. Our threats also worked to make them back down in Korea, and on the Berlin Blackade.

Cuban missile crisis showed both the USA and USSR how dangerous force is in a nuclear age. Within a year after the incident they agreed to a Hotline and a Limited Test Ban Treaty.

A freeze now would only lock in the Soviet's advantage in defense. We must catch up to them and then negotiate from a position of strength. Once our Pershing II missiles are in Europe, our Trident missiles are on our submarines, and our cruise missiles are in the air, then we can negotiate.

Now, when USA and USSR have a rough parity in arms is the time to negotiate. If we get ahead, USSR won't want to negotiate. Trident, Pershing II, and cruise missiles are so fast, accurate and invulnerable, that they actually invite USSR to strike first. Also, the Pershing II missiles we will put in Europe in 1983 take only six minutes (compared to 30 minutes of previous missiles) to reach USSR heartland. They leave no reaction time to check if an alert was an error. USSR will put its missiles on "hair-trigger" alert and may be tempted to try a first-strike. Cruise missiles can escape radar and so may be equally destabilizing.

The government has classified facts and experts who are in the best position to know what is best for the country. Leave it to the experts; it is their job. We voted in the government, now let it do its job.

Nuclear arms decisions are too important to leave up to governmental officials, who can become isolated from the people and who can be pressured by big business. The government that we elected should listen to what we want them to do, and should give us all the facts so we can decide what is right. If we could die in a nuclear war, we have a right to make decisions about nuclear war.

LESSON 9: TAKING ACTION: THE HISTORY OF CIVIL DISOBEDIENCE

Recommended for:
High School
Social Studies
English

Have students trace the history of civil disobedience and non-violent protest as a means of affecting social and political change in the United States by reading excerpts from various historical, autobiographical, and biographical sources. As students read, discuss the following questions:

1. What form of action did the civil disobedience take? What else could the participants have done (other than an act of civil disobedience)? What else had they already tried?

2. What risks did the participants take?

3. What were the personal consequences for the participants?

4. What reasons did the participants give for choosing civil disobedience as the course of action taken? What do you think of their reasons?

5. What were the arguments against this course of action?

6. How effective was the act of civil disobedience? What was accomplished by it?

7. Is breaking the law ever justified? If you think it is, then when? (Refer to the"Using Printed Materials" section, and the article entitled "Vermont Soldier Turns to Peace.")

Below are some examples of acts of civil disobedience taken in the United States. Ask your students to find accounts of the actions from several different sources.

1. The Boston Tea Party.

2. Henry David Thoreau's refusal to pay taxes in protest of slavery, 1849.

3. Susan B. Anthony's illegal vote and subsequent trial in Rochester, NY, 1872.

4. The Suffragists' use of pickets at the White House, and their arrests and jail sentences as a result, 1918.

5. The sit-down strikes in the automobile factories of Detroit, 1930's.

6. The sit-ins at lunch counters in the South by Black students and other civil rights activists in the 1960's. (Coming of Age in Mississippi by Anne Moody is a good autobiographical account of this.)

7. Rosa Parks and the Montgomery, Alabama bus boycott.

8. Martin Luther King's activities in the 1960's civil rights movement.

9. The draft resisters of the Viet Nam War era, and the current draft resisters.

10. Sit-ins at the U.N. in support of disarmament, June 14, 1982.

LESSON 10: TAKING ACTION: THE PEACE MOVEMENT

Recommended for
High School
Social Studies
English

Have students read the accompanying article entitled "Support Grows for U.S. School of Peace." Study the first proposal for a U.S. Department of Peace made in 1793 by Benjamin Banneker and Benjamin Rush. What were the arguments for it? Against it? Read the editorial in the New York Times (August 9, 1982) that refers to the proposed Peace Academy. What point of view does the editorial take? Do you agree or disagree? Why?

What do you think about the idea of establishing either a Peace Academy or a U.S. Department of Peace? Which do you think would be more effective? What should be taught in a school of peace? Why? Who should go to the school? What should the duties of a U.S. Department of Peace be?

Research the activities of the peace movement in the United States in the early 1900's. Who was Dorothy Day? Who were some of the other key figures? What were the goals of the peace workers? How did they try to reach their goals? Were they successful? Read about the peace movement in the 1960's from several different types of sources. What were the similarities and differences between this movement and its predecessors?

Have students research the peace movements in the U.S. before World War I and World War II. Discuss the criticism levelled at these movements for jeopardizing our country's readiness to enter war.

Boston Globe August 4, 1982

Support grows for US school for peace

By Robert Levey
Globe Staff

The idea surfaced for the first time in 1793, when Benjamin Banneker, a black philosopher, and Benjamin Rush, a signer of the Declaration of Independence, proposed a US Department of Peace. It got nowhere.

On 139 more occasions since 1940, proposals for either a Department of Peace or a US Academy for Peace have been introduced in Congress. None ever even reached the hearing stage.

But this summer another proposal for a US Academy for Peace is inching its way through Congress over the objections of the Reagan Administration and the diplomatic establishment.

There are 54 senators and 130 member of the House of Representatives co sponsoring bills that would create and provide funds for the academy. And more than 30,000 citizens have contributed to the National Peace Academy Campaign, the lobbying effort that has kept the proposal alive

For the last six years, proponents have been raising money and welding congressional support for a government-funded school in the Washington area that would train diplomatic and military personnel and other professionals in techniques for conflict-resolution and peacemaking.

The State Department and the heads of several foreign service graduate programs, including Dean Theodore Eliot at the Fletcher School of Law and Diplomacy at Tufts University, dismiss the idea as a wasteful and unnecessary duplication of their efforts.

The current legislation in the House (H.R. 5088) and Senate (S. 1889) was filed after a favorable report on the academy proposal last fall by a presidential commission that was appointed in 1979. The Senate bill has already received committee approval and could be brought to a vote by the end of this month. The House bill awaits a committee vote and, according to a congressional source, the House will probably wait to see how the Senate deals with the bill before taking further action.

In testimony at a House hearing July 20, the commission vice chairman, James H. Laue, a University of Missouri-St. Louis sociologist, urged lawmakers to keep in mind the commission's conclusion that "peace is neither utopian nor a sign of weakness or cowardice . . . Peace requires knowledge, judgment, and skill no less complex than what is required for war."

Laue cited the recent British-Argentine conflict for control of the Falkland Islands as a vivid example of the need for a peace academy and the specially trained negotiators it would produce. The United States failed in its attempt to help the combatant countries avoid violent conflict, Laue said, because it neglected to employ a number of new techniques that "conflict analysts" have developed in recent years.

A big mistake was the United States' "basic role conflict between our expressed role as 'mediator' and our actual underlying alignment as an advocate for one of the parties – Great Britain," Laue said.

Rep. Dan Glickman (D-Kan.), a strong supporter, said the academy's three-fold mandate would be to conduct research in peacemaking, to train individuals from government, private enterprise and voluntary associations in peacemaking skills and to serve as an information clearinghouse in the field.

The proposal embraces some of the broad concepts that have been refined in the work of Roger Fisher, a Harvard Law School professor and an expert on the new negotiating techniques. He told the House committee that "work at the Harvard Negotiation Project over the last few years has convinced us that there are some basic, common-sense concepts relevant to dealing with international conflict that are too often ignored, that can be learned and that can make a big difference."

These conflict-resolution techniques have begun to be used successfully in resolving hostage-takings and calming prison riots, he said. Though "lawyers have spent a thousand years working on the litigation process," he said, "comparatively little work has been done on improving the negotiation process."

Fisher said there is an urgent need to start assembling all known materials on "the state of art" in the field of conflict resolution both for immediate use by negotiators and in preparation for the research and teaching functions of the proposed peace academy.

The Administration's opposition is blunt. David Stockman, director of the Office of Management and Budget, has said that "a new government entity in this area is unnecessary." And President Ronald Reagan has told Sen. Spark Matsunaga (D-Hawaii), who headed the commission that proposed the peace academy, that he cannot justify spending $66 million for the academy when work is already being done in the same areas by private universities and foundations.

Supporters point out that the start-up cost of $66 million to build and operate the academy for its first four years is one-fifth the cost of a B1 bomber. Beyond that, Milton C. Mapes Jr., executive director of the National Peace Academy Campaign, stresses that "the first major effect of the Peace Academy would be its symbolism in establishing US leadership in the field of creative peacemaking."

In arguing their case, advocates of the proposal like to quote General of the Army Omar Bradley, who said that "we have grasped the mystery of the atom and rejected the Sermon on the Mount. Ours is a world of nuclear giants and ethical infants. We know more about war than we do about peace. We know more of killing than we do of living."

Supporters believe that graduates of a future US Academy for Peace, a fourth of whom would come from other countries, would make the world a safer place by helping nations find better and surer ways to wage peace rather than war.

LESSON 11: TAKING ACTION: PRACTICAL SUGGESTIONS

Recommended for:
High School
Middle School
Social Studies
English

When students start to become aware of the dangers of nuclear war, they can become paralyzed if they feel helpless to do anything about it. These exercises help to break through any paralysis by showing how they can take action. They are not necessarily meant to get students to take action but rather to help them think through what is involved in doing so.

Have the class choose a hypothetical school or home issue to work with:

--You want permission to use the family car.
--You want permission to stay out later at night.
--You want a school-student-run snack bar, student lounge, or open-campus policy.

Have students suggest ideas about what they might DO to get what they want. Put all their ideas on the board. Discuss what each action involves in terms of:

--time and effort
--possible compromises you might have to make in exchange for what you want
--possible negative effects (punishment, people get angry at you)
--possible positive effects (you get what you want, people appreciate your action)
--problems that might come up (costs)

POSSIBLE ACTIONS ON NUCLEAR ARMS

The list on the following pages gives 21 ideas on actions people can take to promote their points of view on the nuclear arms issue. Before giving it to students, have them brainstorm first on their own list of ideas. Then pass out this list and see where the two lists match. If any of their ideas aren't on the list, add them.

Follow-up: Have each student check off those actions they would be most likely to take. Have a class discussion on what several students' choices involve (time and effort, negative and positive effects, problems that might come up).

1. Learning can be action. Get informed about nuclear arms. Read articles, watch TV programs, listen to speakers. Learn the arguments on both sides. Learn ten significant facts that you can use in a discussion.

2. Make a list of your interests. Think about how you could use your interests to take action on the issue of nuclear arms.

3. Discuss the issue of nuclear arms with your friends. Discuss it with your family. Find out what facts and opinions people have and tell them your opinions and facts.

4. Join a group at school, in your city, or a national group that works on the issue. If you can't find one, start one.

   In 1982, five young women between the ages of 12 and 20 got together to talk about how to get other kids involved in the effort to stop the nuclear arms race.

   The result was a new organization, the Children's Campaign for Nuclear Disarmament, and a plan to get children to write to the President, asking him to take action.

   They drafted a brief statement, warning of the growing threat of nuclear war and noting that "our leaders are making decisions that affect us, as children, more than anyone else."

   They sent out 12,000 copies of that statement to peace groups, churches, newspapers and individuals across the country, asking that letters to the President be mailed to them in time for their October 17th trip to Washington.

   The letters were read in front of the White House, and then delivered by the children to the White House mail room.

   Children's Campaign for Nuclear Disarmament
   R.D. 1, Box 346
   Chaddsford, PA 19317

5. Write a letter to your school or town newspaper on your opinions. Write your town government, your State and Federal representatives asking them to take action on the issue.

6. Join a voter registration drive. One organization aimed at registering young voters is Students Allied for Voter Education For Our Future (SAVE Our Future).

7. Wear a button, bumper sticker, or T-shirt that states where you stand on nuclear arms. If you can't find one you like, make one.

8. With other people your age, hold a car wash or bake sale to raise money to support groups that agree with you on the issue.

9. Get a group at school together to plan a school-wide "Teach-in" on the subject. Bring in speakers on both sides, have your school order films to show, pass out photo-copied information sheets.

10. Attend rallies that are being held in your area. Raise money to send a group of students to rallies or marches in other areas.

11. Go with a group of students to your principal, superintendent, PTA, or School Board to ask that the school give students information about nuclear weapons through social studies classes, assemblies, or a whole course on the subject. Bring a list of specific questions you would want this teaching to answer.

12. Take advantage of class assignments to debate nuclear arms, to write an essay on the subject, or a poem or research paper. Ask your teachers in art, science, English, and other subjects to give assignments about the arms race. Ask your teachers to "publish" any writing that results from these assignments by duplicating copies for the whole class, by posting them on a wall, by submitting them to school or local newspapers -- even The Congressional Record (through your Congressional representative).

13. Ask your school and town libraries to buy a full collection of books on nuclear arms so that everybody can become informed. Ask them to display the books they buy. Volunteer to do a display on the subject for them.

14. Plan and stage an "event" that will capture people's interest and imagination, and call the media to get them to cover it. Ideas: an outdoor street drama, a musical event, a public recitation of "nuclear numbers" (See "A-Bomb Almanac" in the Using Printed Materials section).

15. Compose a song that expresses how you feel about nuclear weapons. Get a group together and make a big banner that you can take to rallies.

16. Take a poll of students in your school, or of people in your town to find out their thoughs and feelings on nuclear weapons. Send your results to the school or town newspaper.

17. Prepare an art display on the subject and ask to have it put up in your school, in a bank, at the library, or city hall.

18. Form a group that gets together each week to read articles on the subject. Consider all sides. Think of ways to tell other people what you learned.

19. Ask your school to help you find a group that sets up pen-pals. Ask to have a pen-pal in a nuclear-weapons producing country, preferably the Soviet Union. Exchange descriptions of your daily life, your values, and your concerns about war.

    a. International Friendship League
       22 Batterymarch Street
       Boston, MA 02109
       (617) 523-4273

    An international correspondence society to match Americans of all ages with pen-pals in different countries and territories. $3.00 fee for people below age 20 to join.

    b. World Pen Pals
       1690 Como Avenue
       St. Paul, MN 55108
       (612) 647-9566

    For people ages 12-20 in the United States and 150 countries and territories who exchange letters. $1.00 for individuals, special group rates.

    c. The following excerpts are part of a student letter writing project to the Soviet Citizens (taken from Decision Making in a Nuclear Age by E. Lewis and R. Snow). Contact: Facing History and Ourselves Project, 25 Kennard Road, Brookline, MA 02146.

"We don't hear very good things about the Soviet Union here. Just the bad things, like the invasion of Afghanistan, or the possible invasion of Poland. We only know about the government -- not the people. While writing this letter, I tried to see the Russians as real people; people who have hopes, worries, fears. I hope that as you are reading this letter, you will try to do the same for me -- see me as a person, not a country, or an event. There are bad people in the U.S. But there are plenty of good ones too."

"As for my future, it's hard to say. Will I marry? Will I have children? Will I devote my life to a profession or something I strongly believe in? I can't say. It's hard for me to seriously think of the future, when there is the terrifying reality that I and all of those around me may not even exist in the future. I am, of course, referring to nuclear war. It is overwhelming to me, as it must be to you, that every human being on this planet must live each day to its fullest, because the next day may never come."

20. Find out about your town's national civil disaster preparedness plan. Ask them to hold a public hearing. Speak out about your opinions on the usefulness of the plan.

21. Write your local cable television station or radio station or the national stations and ask them to do more programming on the subject. Tell them what you want to know more about specifically.

WRITING POLITICAL ACTION LETTERS

1. Spell names and addresses correctly.

2. Be brief. Don't use more than one page.

3. Write clearly or type.

4. Get to your point right away. Be specific about your topic and what you want the person to do about it (I support/oppose the state civil defense plan and urge you to vote for/against it.)

5. Back up your opinion with reasons, especially about how the issue affects you personally. (Since our town is just ten miles from a strategic military site, evacuation plans and shelters will do no good. I am a student and would rather see the money go for student loans.)

6. Don't insult, name-call, threaten or demand. None of these work. Reasons and personal experiences do.

7. Add some praise if you can. (I appreciate what you are doing to get the arms freeze issue on the ballot.)

8. End with a question to give the person a reason to answer your letter. (I want to know your position on this proposal. How do you propose to help students get educational loan funds?)

LESSON 12: TOPICS FOR FURTHER RESEARCH

Recommended for:
High School
Middle School
Social Studies
English
Science, et al.

1. Additional student research projects could be done on individuals who have taken a difficult or unpopular stand. These could relate to a number of subject area classes -- math, science, social studies, literature, art, etc.

2. Students could research the lives of some of the people who worked on the early development of the atomic bomb: Albert Einstein, J. Robert Oppenheimer, Edward Teller, Enrico Fermi, Leo Szilard, other members of the Manhattan Project, etc. (The August 16, 1982 edition of the Boston Globe contains an article on this topic by George Weil, assistant to J. Robert Oppenheimer, entitled "A Scientist Who Couldn't Love the Bomb.") Students could then answer the questions:

   --How did this person become involved in the development of the atomic bomb?

   --Why did this person become involved?

   --What effects on the world and its people did the person think this new development would have?

   --What reservations did this person express about the work being done on the development of a nuclear weapons technology?

   --Did the person speak out publicly about the use of this new technology? Gather at least three quotes by the person relating to this.

3. Students could research the number and types of nuclear weapons treaties the United States and the Soviet Union have signed with each other in the past 30 years. What purpose did each treaty serve? Was it to limit testing, limit weapons, reduce the risk of war, or prevent the spread of weapons? Which treaties did Presidents Eisenhower, Kennedy, Johnson, Nixon, Ford, Carter and Reagan negotiate and sign? (Possible sources: World Military and Social Expenditures by R. Sivard, available from ESR; and The Threat of Nuclear War: A Briefing Manual by the Union of Concerned Scientists.)

BOOKS FOR MIDDLE SCHOOL STUDENTS

Davies, Andrew. Conrad's War. Crown, 1980. 120pp. $7.95. A bizarre story of a young boy's fantasies about war, killing, and guns.

Degens, T. The Game on Thatcher Island. Viking, 1977. 148 pp. $7.95. Harry is flattered when a group of older boys invite him to participate in their game of war on Thatcher Island, but his elation disappears when the game takes a terrifying turn.

Degens, T. Transport 7-41-R. Viking, 1974. 171pp. $7.95. (paper, Dell, $1.50.) On one level this story is one of sheer adventure; on another it is a powerful statement on the devastation war and misguided patriotism can impose on the human spirit.

Levoy, Myron. Alan and Naomi. Harper & Row, 1977. 192pp. $7.95. A powerful portrait of Naomi, who has been traumatized by having witnessed Nazi brutality to her father in France during the war.

Meyer, Edith Patterson. In seach of peace: Winners of the Nobel Peace Prize, 1901-1975. Illustrated by Billie Jean Osborne, Abingdon, 1978. 208pp. $7.95. Information is presented about the Nobel Peace Prize and its recipients with an emphasis on efforts by individuals and organizations to keep humanity cooperating and at peace.

Nagasaki Prefecture Hibakusha Teacher's Association. In the Sky Over Nagasaki: An A-Bomb Reader for Children. 105pp. $3.50 (booklet). Available from: Peace Resource Center, Box 1183, Wilmington College, Wilmington OH 45177. Written from the point of view of a big camphor tree which survived the bombing. Use with teacher or parental guide.

Nagai, Takashi, ed. Living Beneath the Atomic Cloud: Testimony of the Children of Nagasaki. Tokyo San-Yu-Sha. 65pp. $3.25 (booklet). Available from: Peace Resource Center, Box 1183, Wilmington College, Wilmington OH 45177. Vivid and moving descriptions by children who were from 5 to 12 years old at the time of the bombing.

Orgel, Doris. The Devil in Vienna. This is a story of individual acts of bravery and love in a world characterized by mass indifference and betrayal.

Osada, Arata. Children of the A-Bomb: The Testament of the Boys and Girls of Hiroshima. New York: G.P. Putnam and Sons, 1959. Oral histories by Japanese who were junior high school students when the bomb was dropped on Hiroshima.

Rubinstein, Robert E. When Sirens Scream. Dodd, Mead, 1981. "A teenage boy whose father is a state representative finds himself caught up in the problems caused by living near a nuclear power plant. A novel for readers aged 12 and up." $7.95.

Sampson, Fay. The Watch on Patterick Fell. Greenwillow Books, N.Y. 1978. 153pp. $7.95. Set in England some years in the future, the story postulates a situation where wide-spread protests force the shutdown of nuclear power plants and waste disposal facilities.

Sone, Monica Itoi. Nisei Daughter. Seattle: University of Washington Press, 1979. 238pp. (no price available). A unique and moving personal account of a Japanese-American family's relocation during World War II.

Uchida, Yoskiko. Journey Home. Atheneum, 1978. 131pp. $7.95. A Japanese-American girl and her family attempt to reconstruct their lives after their release from an American concentration camp in an atmosphere of strong anti-Japanese feeling which fosters fear, distrust, and violence. The sequel to "Journey to Topaz".

_____. Journey to Topaz: A story of Japanese-American Evacuation. Scribner, 1971. 149pp. $7.95. After Pearl Harbor is attacked, a Japanese-American girl and her family are forced to go to an "aliens" camp where they experience suffering and humiliation. A story of dignity and courage.

BOOKS FOR HIGH SCHOOL STUDENTS

(See the adult Book Section of the Bibliography for additional listings.)

Barash, Ph.D., David P., Lipton, M.D., Judith E. Stop Nuclear War! A Handbook. Grove Press, 196 W. Houston St., New York, NY 10014. Foreword by Dr. Helen Caldicott. A guide to how individuals can meaningfully and effectively act to stop nuclear war, and a source-book for grassroots organizing. Also provides background on the history and costs of the arms race, deterrence theory, psychological consequences of living with the threat of nuclear war, the graphic effects of Hiroshima and Nagasaki, etc. $7.95.

Barnet, Richard. Real Security: Restoring American Power in a Dangerous Decade. Simon and Schuster, 1981. An outstanding discussion of the philosophy and use of nuclear weapons as part of our foreign policy. Addresses the meaning of real security in a nuclear age. $4.95.

Bender, David L. The Arms Race: Opposing Viewpoints. Greenhaven Press, 577 Shoreview Park Drive, St. Paul, MN 55112. A significant source for high school students to include opposing viewpoints on the arms issue. The book reprints four to six viewpoints on each of four questions: Why is there an arms race? Do nuclear weapons provide security? Are nuclear weapons immoral? and How can the arms race be stopped? Authors include the U.S. Department of Defense, the USSR Ministry of Defense, the Center for Defense Information, Richard Barnet, Phyllis Schlafly, Randall Forsberg, Alexander Haig, and Leonid Brezhnev.

Blumenfeld, York. Jenny, My Diary. Little, Brown, 1982. Jenny is a haunting and terrifying account of survival of a woman who lives through a nuclear holocaust in an underground shelter with a small group of men, women and children. Though they survive, they re-emerge into the daylight of a new world too horrifying to contemplate. Jenny's feelings and the intricacy of human relationships as they change in response to the ordeal are vivid. For adults and mature teenagers. $5.95.

Caldicott, Helen. Nuclear Madness. Physicians for Social Responsibility, 639 Massachusetts Ave., Cambridge, MA 02139. An impassioned account of the health hazards posed by nuclear power and nuclear weapons, between whose grim effects the author sees little distinction. The book is readable, informative, and action-oriented. It is valuable as an introduction to nuclear issues and for self-education. $3.95.

Committee on the Present Danger. Has America Become Number Two?: The U.S.-Soviet Military Balance and American Defense Policies and Programs. Committee on the Present Danger, 1800 Massachusetts Ave., NW, Washington DC 20036.

Common Cause. You Can Prevent Nuclear War. Common Cause, 2030 M St., NW, Washington, D.C. 20036. Powerful collection of articles on all nuclear issues: history, strategy, prevention of use of nuclear weapons. Exceptionally fine use of graphics, and includes interviews with military, medical, and political figures.

Federal Emergency Management Agency. Protection in the Nuclear Age. The Reagan Administration's crisis evacuation plan for target cities to host cities and towns in the event of a nuclear attack. FEMA, 1725 I St., NW, Washington DC 20472. Free.

Gottlieb, Sanford. What About the Russians? S.T.O.P. Nuclear War, 11 Garden St., Cambridge, MA 02138. An examination of our perceptions of the Soviets and the realities of their foreign policies is an excellent classroom book for high school students. Short and clear, it provides a balanced treatment of the subject. Sources of U.S. distrust of the Soviets and our relation with the Soviet Union is looked at. It takes a realistic look at Soviet expansionism and at their overall foreign policy goals. A comparison of foreign policy conduct and a discussion of our common interest completes this readable book. $3.00.

Ground Zero. Thinking About Preventing Nuclear War. 1982. Details six basic scenarios for how a nuclear war might start. It then examines possible firebreaks for halting the spread of such a war. This is a useful book to help high school students understand the long-term efforts necessary to prevent nuclear war.

_____. Nuclear War: What's In It For You? Pocket Books, $2.95. Also available from ESR, 23 Garden St., Cambridge, MA 02138. $4.00. This extremely readable, concise book is packed with information. An excellent resource with which high school students can begin to educate themselves on nuclear issues.

_____. What About the Russians and Nuclear War? Pocket Books, 1983. Designed to provide education on the role of U.S.-Soviet relations in nuclear war prevention. Who are the Soviets? Why do they have nearly 10,000 nuclear warheads aimed in our direction? How can we ensure that neither the U.S. nor the Soviet Union will launch a nuclear attack against the other? These are some of the questions discussed in this timely, valuable book for high school classrooms. $3.95.

Hersey, John. Hiroshima. Bantam Books, 1946. A classic journalistic account of the dropping of the A-Bomb on Hiroshima and the events which followed. $2.25.

Ibuse, Masuji. Black Rain. Trans. from Japanese by John Bester. Kodansha International Ltd., 1969. This novel, first published in 1969, is about a family who lived through Hiroshima in 1945. $4.95.

Kennan, George F. The Nuclear Delusion: Soviet American Relations in the Atomic Age. Pantheon Books. As America's preeminent Soviet expert, Kennan offers the best hope for improving the American public's understanding of the Soviets. This book is a collection of Kennan's writing

and thoughts over several decades about Soviet-American relations. He places the US-USSR relationship into an historical perspective based on his extensive experience in the Soviet Union. The book offers one of the most important insights into the Soviet view and position that has been published anywhere. Excellent for use in the high school classroom and superb for college/university and self-education. $13.95.

Keyes, Jr., Ken. The Hundredth Monkey. Vision Books, 790 Commercial Ave., Coos Bay, OR 97420. Based on the Hundredth Monkey phenomenon, which shows that when enough of us are aware of something, all of us become aware of it. The theme of this book is that enough people can make a difference. $2.00.

Lens, Sidney. The Day Before Doomsday. Beacon Press, 1977. A history of US nuclear arms from Hiroshima to the administration of Gerald Ford. $5.00.

Monitor. A periodical which contains detailed factual analysis of current military issues, often contradicting popular impressions. Excellent resource for secondary current events. Highly recommended. Center for Defense Information, 122 Maryland Ave., NW, Washington, DC 20002.

Nuclear Mapping Kit. Student/class project. Guides students in preparing a map of what damage would be inflicted on their communities by nuclear missiles/bombs. New Manhattan Project, 15 Rutherford Place, New York, NY 10003.

Polner, Murray, ed. The Disarmament Catalogue. The Pilgrim Press, 132 W. 31st St., New York, NY 10001. 1982. A remarkable and distinctive collection of articles, resources, poems, photos, bibliographies among other material make this publication a standout. The author's purpose is to provide "conditions and resources which enable people to build coalitions against the warmakers." To this end, the Catalogue attempts to bring together ways people can begin to "Get political. Choose life," or face the victory of militarism and annihilation. An invaluable resource of information. Teachers of all grades, including university, will discover a vast source of information here for their own background use or for reproducing for the classroom. $12.95.

Schell, Jonathan. The Fate of the Earth. Knopf, 1982. Eloquent essay on the implications of nuclear weapons for the future of the planet. This book has been called the most important book of the decade. Schell manages the impossible: to write poetically about blast waves, global epidemics, in fact, about the destruction of the planet. $11.95.

Shute, Nevil. On the Beach. 1957. The classic novel which depicts the last days of the survivors of a nuclear attack in Australia.

Sivard, Ruth Leger. World Military and Social Expenditures, 1982. World Priorities, Inc., Box 1003, Leesburg, VA 22075 or ESR, 23 Garden St., Cambridge, MA 02138. This publication is outstanding. Sivard's research is impeccable. This 44-page pamphlet documents that world-wide military costs have risen to $600 billion a minute, $100 billion of which goes to increase the nuclear weapons stockpile. Includes a fold-out chart detailing the effects of a one-megaton bomb on both Washington and Moscow. Excellent teaching resource for high school - college, adult study groups, or for self-education. $4.00.

Stubbs, Gilbert. How Realistic is the Nuclear Freeze Proposal? American Security Council Foundation, Boston, VA 22713. A short analysis of the freeze movement and its major proposals from a conservative viewpoint. (Asserts that the claims of freeze proponents are based on inaccurate and misleading information.) $2.00.

"War and Peace in the Nuclear Age." Special section in the Boston Sunday Globe. 56-page magazine on the nuclear arms race and the struggle to stop it. Winner of 1983 Pulitzer Prize. October 17, 1982. Boston Globe, Morrissey Blvd., Boston, MA. $1.00.

Washington Report. American Security Council. Washington Communications Center, Boston, VA 22713. A conservative newsletter containing analysis of developments affecting the nation's security. Contributors include military and government personnel. Some recently covered topics are: "The Great Game of the 1980's: Nuclear Disarmament" and an attack on "The Nuclear Weapons Freeze Movement."

Wheeler, Harvey, and Burdick, Eugene. Fail Safe. Depicts the dilemma of an American President who must decide whether to prevent further nuclear war after an American bomber has mistakenly destroyed Moscow. Was made into a feature length film. High school - adults.

Zacharias, Jerrold R., Gordon, M., Davis, S.R. Common Sense and Nuclear Peace. Education Development Center, 1983. Available from ESR, 23 Garden St., Cambridge MA 02138. This pamphlet describes in non-technical language the long-term demands upon us to wrest our fate from the military. The authors discuss a pre-emptive strike, deterrence, nuclear war fighting, and why "bigger is not better." Their real focus is on steps toward a non-belligerent world and how we can gird ourselves for "the long pull." Good for high school students and adult study groups. $2.00.

Fisher, Roger, and Ury, William. Getting to Yes. Houghton-Mifflin, New York, 1981. An excellent book on the art of negotiating.

RESOURCES

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BIBLIOGRAPHIES/RESOURCE LISTS

Barber, Jacqueline, Bridger, G., Sneider, C., eds. Nucleography: An Annotated Resource Guide for Parents and Educators on Nuclear Energy, War, and Peace. Nucleography, 2847 Fulton St., Berkeley CA 94705. One of the best done and most comprehensive listings. $5.00.

Center for War/Peace Studies. Change: A Guide to Selected Curriculum Materials. Center for War/Peace Studies, 218 E. 18th St., New York, NY 10003. Good descriptions of curriculum materials for grades 7-12 on global awareness. Included are comments from teachers who have used the programs listed.

Dougal, Lucy. War and Peace in Literature. World Without War Publications, 67 E. Madison, Suite 1417, Chicago IL 60603. An annotated listing of 354 literary works from the western tradition that holds a mirror up to war. $5.00 plus .75 postage.

Ground Zero. Ground Zero Bibliography. Ground Zero, 806 15th St., NW, Washington, DC 20005. Covers arms control, the effects of nuclear war, and the history, politics and economy of the Soviet Union. Free, up to 3 copies.

Educators for Social Responsibility. ESR 1983 Bibliography of Annotated National Resources, Books, and Articles. Available from ESR, 23 Garden St., Cambridge, MA 02138. A 39-page addendum to the 1982 ESR bibliography provides descriptions, recommendations, sources, and prices for: curricula, books, pamphlets, newsletters, catalogues, classroom activities, teaching resources, audio-visual aids, kits, maps, and activities. Topics covered include: the Soviet threat, nuclear weapons advocacy, the arms race, peace education, ethics, the social and economic impact of military spending, the Freeze, conflict resolution, civil defense, proliferation, nuclear world, health effects, disarmament. It also includes a special section on the psycho-social aspects of the nuclear arms race. Ranges from elementary-adult. $5.00.

Greiner, Rosemarie. Peace Education: A Bibliography Focusing on Young Children. 126 Escalona Dr., Santa Cruz, CA 95060. A list of materials which emphasize attitudes and skills necessary to building peace. Six topics are covered: self-awareness, awareness of others, conflict resolution, love of nature, global awareness, imagination. $2.50.

Nuclear Information and Resource Service. Growing Up in a Nuclear Age: A Resource Guide for Elementary Teachers. NIRS, 1346 Connecticut Ave., NW, Washington DC 20036. An annotated listing of books, articles, audio-visuals, a section on background reading for teachers, and an annotated bibliography for children of books for them to read themselves. $5.00.

_____. Nuclear Dangers: A Resource Guide for Secondary Teachers. A resource guide like the one above for older children and young adults.

Urso, Ida. Teacher's Resource Manual on World-mindedness. Occasional Paper #8, Curriculum Inquiry Center, Graduate School of Education, University of California, Los Angeles, 1981. This superb 132 page resource guide lists every kind of material, describes it clearly, and lists sources. It covers all aspects of holistic education, futuristics, interdependence and global problems, peace, human rights, disarmament, and more. There are bibliographies, periodical lists, resource centers, and opportunities for participation by young people.

Weiss, Evelyn. Peace Teaching and Children: Resources for Teachers and Parents, K-6. Riverside Church Disarmament Program, Riverside Dr. and 120th St., New York, NY 10027. A listing of 60 annotated, valuable resources with grade levels, sources, prices, and mailing costs. Peace education materials designed expressly for the early and middle childhood years. $.50.

Wilmington College Peace Resource Center. Annotated Resource List. Wilmington College, Pyle Center, Box 1183, Wilmington, OH 45177. Audio-visuals, books, classroom materials all available from the Hiroshima/Nagasaki Memorial Collection at this college.

CURRICULAR MATERIALS

American Friends Service Committee. Peace Education Resources. AFSC, 1501 Cherry St., Philadelphia, PA 19102. A series of pamphlets on the freeze and nuclear disarmament. They include a "Nuclear Mapping Kit" and a citizen action organizing guide.

Abrams, Grace and Fran Schmidt. Learning Peace. Philadelphia: Jane Addams Peace Association, 1972. Age range: 7-12 grade. Useful bibliography: books, films. List of peace organizations. Activities and assignment ideas on global conflict resolution, distribution of world resources and population, nationalism, world problems, and international organizations. Watch for use of man and he as universal.

Abrams, Grace and Fran Schmidt. Peace is In our Hands. Philadelphia: Jane Addams Peace Association, 1974. Age range: elementary. Useful bibliography: books, films, records. Ideas, lessons, bibliographies for the following topics: diversity and commonality, conflict-solving, ecology and interdependence.

Aquino-Mackles, Alexis, David C. King and Margaret S. Branson. Myself and Others. Global Perspectives in Education, 218 E. 18th St., New York, NY 10003, 1979. Age range: Elementary. Curricular ideas, activities and suggestions for teachers, change, communications, conflict and interdependence.

Austill, Chris, ed. Snow, Roberta, coordinator. DecisionMaking in a Nuclear Age. Revised edition. Educators for Social Responsibility, 23 Garden St. Cambridge MA 02138. 1983. A curriculum designed for high school students in units from three to twelve weeks in length. The objective of the curriculum is to promote an understanding of nuclear weapons within the context of human beings making choices. This curriculum is ultimately about how to think, not what to think. $12.50.

Bressler, Marion A. and Leo A. Bressler. Peace or War. Englewood Cliffs, N.J.: Prentiss-Hall, 1977. American Problems Series, ed. J.R. Fraenkel. Level: High School/college. Chapters on the nature of war, causes, effects, alternatives and selections from writings about war.

Carpenter, Susan. A Repertoire of Peacemaking Skills. COPRED, Kent State University, Kent, OH 44242. A booklet in six sections. Basic for curriculum development in peace education. The listing of skills is an excellent starting place for developing course objectives. Specific suggestions and activities for teaching peace-making skills.

Center for Global Perspectives. Patterns for Teaching Conflict. Center for Global Perspectives, 218 E. 18th St., New York, NY 10003. Practical lesson plans arranged in Part A: K-3; Part B: 4-6.

Comstock, Margaret. Building Blocks for Peace. Philadelphia: Jane Addams Peace Association, 1973. Age range: Kindergarten. Useful bibliography: book and film list. This book focuses on the importance of friends and sharing and an appreciation of a variety of cultures through books, films, activities.

Contrino, Grace. Creative Conflict Solving for Kids. Abrams Peace Education Foundation, Box 19-1153, Miami Beach, FL 33119. This two to four week unit for grades 4-8 focuses on conflict resolution. One of the most valuable contributions of this material to the study of nuclear issues is to allow the teacher to draw parallels between conflict situations the students know personally and conflict on a global scale. The unit helps students examine their emotions, the sources of conflicts, the consequences and the challenge of conflict situations, and some means of resolving conflict through confrontation. $8.00.

Ecumenical Task Force on Christian Education for World Peace. Try This: Family Adventures Toward Shalom. Discipleship Resources, P.O. Box 840, Nashville, TN 37202, 1979. Useful annotated bibliography. Geared toward a family or church setting, but many activities could be used in a classroom; each activity has a reference to the Bible.

Glugelman, Andrew. More New Games! and Playful Ideas from the New Games Foundation. Tiburon, CA: The Headlands Press, Inc., 1981. A resource book about a creative new approach to cooperative play and recreation.

Foreign Policy Association. Great Decisions '83. FPA, 205 Lexington Ave., New York, NY 10016. A 96-page book that presents impartial background and analysis of the most important foreign policy issues facing the nation in clear and concise language. Provides current data, the Administration's policy, pros and cons for alternative choices available to U.S. policy makers, suggested readings, glossaries, discussion questions, a world map, and opinion ballots.

Fraenkel, Carter, Reardon. Peacekeeping. Institute for World Order, Inc./Random House. Perspectives in World Order Series, ed. Fraenkel. 1973. Level: high school/college. Various peace-keeping models described in sections each containing description of case. Includes illustrations, map and diagrams.

Gallagher, Mary Beth, McGinnis, J., McGinnis, K., McGivern, M. Educating for Peace and Justice: A Manual for Teachers. Institute for the Study of Peace, St. Louis University, St. Louis, MO 63103, 1974. Units containing teaching strategies for elementary, secondary, and college levels, action possibilities, student readings, case studies, bibliographies.

Global Education Associates. Global Education Resource Guide. Global Education Associates, 552 Park Ave., E. Orange, NJ 07017. Addresses global issues and interdependence from a world order perspective. Includes background reading for educators, and tools for the classroom. $4.50.

Ground Zero. The Minicourse on Nuclear War. Ground Zero, 806 15th St. NW, Washington, DC 20005. A group study guide to accompany Ground Zero's nuclear war primer, Nuclear War: What's In It for You? Works well to encourage discussion. $.25.

_____ The Nuclear Age: A Curriculum Guide for Secondary Schools. Five lessons that provide a basic overview of the new realities of the Nuclear Age to help students understand the threat of nuclear war. Topics covered are the history of weapons development, the difference between conventional and nuclear weapons, the first atomic bomb, the arms race, comparisons between U.S. and Soviet arsenals, the effects of nuclear war, and how to prevent it.

Knownacki, O.S.B., Mary Lou, ed. A Race to Nowhere. Pax Christi, 3000 N. Mango Ave., Chicago, IL 60634, 1981. Teachers' manual designed for Catholic high schools, It covers 25 questions and answers, along with reflection exercises, divided into six sections: the problem of the Soviet threat, the cost at home, the cost abroad, the faith dimension and alternatives to the arms race. $3.00.

Kreidler, William J. Creative Conflict Resolution: A Guide to the Peaceable Classroom. Glenview III: Scott Foresman and Co., 1983. Age range: elementary. Contains a complete discussion on how conflict develops in classrooms and how teachers can respond to it.

Jobs with Peace. Crossroads. 77 Summer St., Boston, MA 02110. A one-week action curriculum on the impact of military spending, for High School English, Science, and Social Studies teachers.

Mellen, Albert A. What Counts in the National Budget: A Peace Education Unit Using Percent. Center for Peace and Conflict Studies, Wayne State University, Detroit, MI. The first resource for mathematics classes using the nuclear war issue. An imaginative pamphlet with problems and study questions.

Metcalf, Reardon, Colby. The Cold War and Beyond From Deterrence to Detente -- To What? Institute for World Order, Inc./Random House. Crises in World Order Series, ed. Metcalf, 1975. Level: high school/college. Case studies: Hungarian Rebellion, Cuban Missile Crisis, Arab-Israeli 1973 War. Chronology and Photographs.

National Committee for UNICEF. An Approach to Peace Education #6. National Committee for UNICEF, 331 E. 38th St., New York, NY 10016. Teacher kit has 5 units on the world, its people/cultures; world military spending; arms race and human rights; activities; posters; visual aids. Grades 4-8.

Nesbitt, William A., ed. Human Nature and War. Center for International Programs and Comparative Studies, University of State of New York Press, Albany, NY 12210. 1973. Level: high school. This is an introduction to the philosophy of whether human nature is or is not innately warlike.

Nesbitt, Abramowitz, Bloomstein. Teaching Youth About Conflict and War. National Council for the Social Studies, Washington, D.C., 1973. Age range: Junior high school, high school. Useful annotated bibliography. A theoretical discussion of conflict, an actual experiment, "Robbers Cave Experiment", some historic curriculum material on conflict and wars, and a game of conflict and cooperation, "Oil Islands Dispute". Valuable material and ideas.

Nuclear Information and Resource Service. Teaching Nuclear Issues. NIRS, 1346 Connecticut Ave., NW, Washington, D.C. 20036. 1983. Leading the field in nuclear power and waste information, NIRS has compiled a comprehensive, practical, and attractive kit for secondary school, which presents a variety of excellent resource material for classroom use. $10.00.

Orlick, Terry. The Cooperative Sports and Games Book and The Second Cooperative Sports and Games Book, Pantheon Books. Two excellect collections of cooperative games, including many from other cultures.

Preiswerk, Roy, Falk, R., Weston, B. Peace and World Order Studies: A Curriculum Guide. Transnational Academic Program, Institute for World Order, 777 United Nations Plaza, New York, NY 10017, 1981. College and adults. 80 pages of essays on world order education, followed by 280 pages of course syllibi plus resource materials and organization.

Prutzman, Burger, Bodenhamer, Stern. The Friendly Classroom for a Small Planet. N.J.: Avery Publishing Group, 1978. Age range: Elementary. Very good bibliography. Methods of conflict resolution and building a positive classroom atmosphere as a precursor to creative problem solving.

Reardon, Colby. War Criminals, War Victims. Institute for World Order, Inc./Random House, 1974. Crises in World Order Series, ed. Metcalf. Level: high school/college. Cases: Andersonville, Nuremburg, Hiroshima, MyLai. Considerations of war and the individual through these four histories.

Riverside Church Disarmament Reader: A Model Course for Disarmament Studies. Riverside Church Disarmament Program, 490 Riverside Dr., New York, NY 10027. An impressive, wide-ranging collection of 61 articles and a course syllabus which serves as a reader for college-level courses.

Switzer, Kenneth A. and Paul T. Mulloy. Global Issues: Activities and Resources for the High School Teacher. Social Science Education Consortium, Inc., Broadway, Boulder CO 80302, 1979. Lesson plans and handouts on: Introducing the concept of global awareness, world trade and economic interdependence, global conflict and the arms race, economic development and foreign aid, environment and technology, energy, and natural resources, and human rights. $7.95.

"Teaching Global Issues Through Simulation: It Can Be Easy", Intercom, Issue #75, Center for War/Peace Studies, 1974. Level: adult. Entire issue devoted to simulation games which help teach global issues.

Union of Concerned Scientists. Choices: A Unit on Conflict and Nuclear War. UCS, 26 Church St., Cambridge, MA 02238. A two to four-week curriculum written in cooperation with the National Education Association and the Massachusetts Teachers Association. The title signals its focus and theme: all of the information, the effects of the atomic bomb on Hiroshima, the dangers of nuclear war, the history of the arms race, proliferation, etc., is framed to educate students about the power of individuals to make a difference in a democracy, even about nuclear war. $10.00

BOOKS ON THE PEDAGOGY AND PSYCHOLOGY OF TEACHING ABOUT NUCLEAR WAR

Abbs, Peter, Barnet, R., Boulding, E., et al. Education for Peace and Disarmament: Toward a Living World: Columbia Teachers College Record. Vol. 84, #1, Fall, 1982. Columbia Teachers College Record, Box 103, Teachers College, Columbia University, New York, NY 10027. An outstanding collection of essays, both theoretical and pragmatic, by distinguished contributors such as Robert Jay Lifton, Seymour Melman, Robert K. Musil, and others. This publication offers thoughtful scholarship by prominent educators on the unique contributions that education can make to preventing nuclear war. Highly recommended as background reading for adults. $6.00.

Abrams, Schmidt, Hoskins, Klein. Handling Conflict and Aggressive Behavior in the Classroom. Portland, ME: J. Weston Walch, 1977. Suggestions for dealing with conflict and aggression and teacher assessment.

Escalona, Sibylle. Children and the Threat of Nuclear War. Child Study Association of America, 1962. Updated and republished as an article in Education for Peace: Focus on Mankind, ASCD, 1973. Discusses, from a developmental point of view, children's anxieties about the world situation and offers suggestions about how parents and teachers can help children deal with their anxieties.

Haavelsrud, Magnus, ed. Education for Peace: Reflection and Action. IPS Science and Technology Press, England, 1976, hard cover. Adult level. A volume of essays arising from the first World Conference of the World Council for Curriculum and Instruction.

Henderson, George, ed. Education for Peace, Focus on Mankind. Association for Supervision and Curriculum Development, Washington, D.C. 1973. Adult level. A book of statistics and literature which informs and prods educators toward becoming more effective teachers of peace.

Stanford, Barbara, ed. Peacemaking. Bantam Books, 1976. High School to adult. Subtitled "a guide to conflict resolution for individuals, groups and nations."

INFORMATIONAL MATERIALS FOR HIGH SCHOOL STUDENTS/TEACHERS/ADULTS

A NOTE ON USING THIS SECTION: If material is available from ESR, the fact is noted in the annotation. Sources are not given for materials published by major publishing houses as it is assumed they will be available from libraries and/or bookstores. Sources are given for materials which come from small or private publishers, or which are available from distributors other than their publishers. Prices are given where known, but are subject to frequent change. When in doubt it is best to inquire. Addresses are given in the "Organizations" section of this book for many of the groups listed here as authors and publishers.

Adams, Ruth, Cullen, S., eds. The Final Epidemic: Physicians and Scientists on Nuclear War. Educational Foundation for Nuclear Science, Chicago, 1981. Available from Physicians for Social Responsibility. Various essays present the medical consequences of a nuclear attack, an analysis of the nuclear arsenals of the world, etc. $4.95.

Akizuki, Tatsuichiro. Nagasaki, 1945. Quartet Books, 1982. An eyewitness account by a doctor of the events after the bomb was dropped on Nagasaki, detailing the medical problems following the attack. $5.95.

Alameda County Nuclear Weapons Freeze Campaign. What to Tell the Children. ACNWF, 4042 Broadway, Oakland CA 94611. Packet for educators who wish to implement a peace curriculum and/or introduce nuclear arms issues into existing subject courses. Includes an annotated bibliography of books for children and for educators on the teaching of war and peace, and extensive resource lists for films, tapes, etc. $7.50.

Aldridge, Robert C. The Counterforce Syndrome: A Guide to U.S. Nuclear Weapons and Strategic Doctrine. Institute for Policy Studies, 1901 Q St., NW, Washington DC 20009. This pamphlet was written by a former nuclear engineer who worked at Lockheed, the nation's number one arms producer. Until 1956, Aldridge saw our policy as retaliating only when fired upon; at the onset of the Trident missile program, however, he "discovered the Pentagon's interest in acquiring a precise counterforce weapon capable of destroying hardened military emplacements such as missile silos." He resigned. This book is notable for presenting its wealth of background information, on such topics as MIRVs, anti-submarine warfare, counterforce missiles (Trident, MX, Cruise, etc.), deterrence, first strike, ballistic missile and bomber defense, SALT, and the Russian threat, in succinct form and in language understandable to the layperson without oversimplifying the highly technical and complex facts.

American Friends Service Committee. Q&A: Questions and Answers on the Soviet Threat to National Security. Available from ESR, 23 Garden St., Cambridge MA 02138. This pamphlet takes on problems such as the Soviet invasion of Afghanistan, Soviet designs on Middle East oil, and questions like, "Isn't military spending good for the economy?" $1.00.

American Psychiatric Association. Psychosocial Aspects of Nuclear Developments. 1700 18th St., NW, Washington, DC 20009. Addresses psychosocial aspects of the arms race, US-USSR relations, terrorism, the accident at Three Mile Island, and contains a landmark essay that reports the results of the impact on young people of living in a world with nuclear weapons. $12.00

The American Sentinel. Phillips Publishing, Inc., 7315 Wisconsin Ave., Suite 1200N, Bethesda MD 20814. Conservative report on national defense, foreign affairs, and internal security. For example, one of its recent articles was titled "How Moscow Manipulated a Disarmament Rally."

Arms Control Association. Resolved: The U.S. Should Significantly Curtail Arms Sales to Foreign Countries. Designed for high school students debating the nationwide topic.

Arms Control Today. Newsletter of the Arms Control Association. 11 Dupont Circle, NW, Washington DC 20036. One of the best resources for self-education, study groups, or background for teaching. Recent issues include "The Reagan Nuclear Strategy," "Moving Forward on Arms Control," and "Arms Control for Real Security." Ordering back issues would provide valuable, in-depth information. For adults.

Barash, Ph. D., David P., Lipton, M.D., Judith E. Stop Nuclear War! A Handbook. Grove Press, 196 W. Houston St., New York, NY 10014. Foreword by Dr. Helen Caldicott. A guide to how individuals can meaningfully and effectively act to stop nuclear war, and a sourcebook for grassroots organizing. Also provides background on the history and costs of the arms race, deterrence theory, psychological consequences of living with the threat of nuclear war, the graphic effects of Hiroshima and Nagasaki, etc. $7.95.

Barnet, Richard. Real Security: Restoring American Power in a Dangerous Decade. Simon and Schuster, 1981. An outstanding discussion of the philosophy and use of nuclear weapons as part of our foreign policy. Addresses the meaning of real security in a nuclear age. $4.95.

Bay Area Educators for Social Responsibility. Stop FEMA. Bay Area ESR, 3840 Howe St., Oakland CA 94611. A response to a Disaster Preparedness Curriculum field-tested in 11 states by the Federal Emergency Management Agency (FEMA). This FEMA plan designed for grades K-12 contains a section on how young people can survive a nuclear war. Stop FEMA outlines the FEMA curriculum and contains a detailed approach of how to present the case against allowing its use.

Beckman, Dr. Peter. The Health Hazards of Not Going Nuclear. Ace, 1980. Argues that nuclear power is far safer than either coal or oil as a source of energy. $2.50.

Beeferman, ed. Cambridge and Nuclear Weapons. Cambridge, MA. 1981. This booklet was the community's response to the FEMA mandate of crisis evacuation. Instead, the Cambridge City Council published this pamphlet which describes the devastation which would result from a nuclear attack and suggests that prevention, not evacuation, is the only valid form of defense.

Bender, David L. The Arms Race: Opposing Viewpoints. Greenhaven Press, 577 Shoreview Park Drive, St. Paul MN 55112. A significant source for high school to include opposing viewpoints on the arms issues. The book reprints four to six viewpoints on each of four questions: Why is there an arms race? Do nuclear weapons provide security? Are nuclear weapons immoral? and How can the arms race be stopped? Authors include the U.S. Department of Defense, the USSR Ministry of Defense, the Center for Defense Information, Richard Barnet, Phyllis Schlafly, Randall Forsberg, Alexander Haig, and Leonid Brezhnev.

Blumenfeld, Yorick. Jenny, My Diary. Little, Brown. 1982. Jenny is a haunting and terrifying account of survival of a woman who lives through a nuclear holocaust in an underground shelter with a small group of men, women and children. Though they survive, they re-emerge into the daylight of a new world too horrifying to contemplate. Jenny's feelings and the intricacy of human relationships as they change in response to the ordeal are vivid. For adults and mature teenagers. $5.95.

Calder, Nigel. Nuclear Nightmares: An Investigation into Possible Wars. Penguin Books, 1981. Outlines the four most likely routes toward nuclear disaster and looks at what nuclear weaponry is and how it is supposed to work. $3.95.

Caldicott, Helen. Nuclear Madness. Physicians for Social Responsibility, 639 Massachusetts Ave., Cambridge MA 02139. An impassioned account of the health hazards posed by nuclear power and nuclear weapons, between whose grim effects the author sees little distinction. The book is readable, informative, and action-oriented. It is valuable as an introduction to nuclear issues and for self-education. $3.95.

Chivian, Eric, Lifton, Robert J., Mack, John E., eds. Last Aid: The Medical Dimensions of Nuclear War. W.H. Freeman, 660 Market St., San Francisco, CA 94104. A collection of essays that grew out of the First Congress of the International Physicians for the Prevention of Nuclear War. Physicians, scientists, and others explore in depth the physical, psychological, and environmental effects of nuclear war. $9.95.

Chomsky, Noam. Towards a New Cold War: Essays on the Current Crisis and How We Got There. Pantheon Books. Critiques America's current world role, the motivations of its leaders, and the ideological support given by mainstream media and intellectuals.

Clayton, Bruce D. Life After Doomsday: A Survivalist Guide to Nuclear War and Other Major Disasters. Dial Press, 1981. Provides information for a family to prepare for and survive a nuclear holocaust, including advice on shelters, food, energy, equipment, group psychology, and more. $8.95.

Committee for the Compilation of Materials on Damage Caused by the Atomic Bombs in Hiroshima and Nagasaki. Hiroshima and Nagasaki: The Physical, Medical, and Social Effects of the Atomic Bombing. Basic Books, 1982.

Committee on the Present Danger. Has America Become Number Two?: The U.S.-Soviet Military Balance and American Defense Policies and Programs. Committee on the Present Danger, 1800 Massachusetts Ave., NW, Washington DC 20036.

Common Cause. You Can Prevent Nuclear War. Common Cause, 2030 M St., NW, Washington, D.C. 20036. Powerful collection of articles on all nuclear issues: history, strategy, prevention of use of nuclear weapons. Exceptionally fine use of graphics, and includes interviews with military, medical and political figures.

Countdown. The newsletter of the Nuclear War Education Project of the Federation of American Scientists. FAS Nuclear War Education Project, 307 Massachusetts Ave., NE, Washington DC 20002. A consistently outstanding publication which focuses on education about the nuclear threat. It highlights curricula and ideas for study groups, lists involved organizations and annotated resources, prints excellent, in-depth articles on selected issues, and reviews books and films. FAS also has available a 130-slide package to illustrate talks; a ten-topic model format for study with suggested readings; mini-slideshows to introduce discussions of each of the ten study topics; a guide to organizing a nuclear war film series; and an invaluable packet of 20 college/university curricula on the nuclear arms race. It would also be useful to order back issues. Highest recommendation. $10 per year.

Congress of the U.S. The Effects of Nuclear War. Office of Technology Assessment, Washington DC 20510, 1980. Government assessment of the long and short term effects of nuclear war: social, economic, physical.

COPRED. Directory of Peace Studies Programs. COPRED, Kent State University, Kent OH 44242. Lists colleges, universities, and seminaries offering peace studies.

Deen, Thalif, Browning, Col. Earl. How to Survive a Nuclear Disaster. New Century Publishers, 1982. Advice on how to stockpile food, store water, find medical supplies, etc. $12.95.

Dolen, P.H., Gladstone, S., eds. The Effects of Nuclear Weapons. U.S. Government Printing Office, 1977. The "bible" on weapons effects from the technical point of view. The book contains, in a back pocket, a very useful circular slide rule that permits calculations for various weapon sizes and methods of detonation. $7.00.

Dunn, Lewis A. Controlling the Bomb: Nuclear Proliferation in the 1980's. Reviews the history of the nuclear age, identifies the countries most likely to obtain the bomb, and proposes policies to help the U.S. contain the bomb's spread and deal with a nuclearized world. $6.95.

Editorial Forum. GEM Publications, Inc., 411 Lallalieu Dr., Hudson, WI 54016. This is one of the best publications available because it presents conflicting views and interpretations of global and national problems. This approach encourages student reports and research. The pamphlets include: "Nuclear Disarmament: Debating the Issue"; "The Arms Budget and Social Priorities"; "Reagonomics: Debating the Issue"; and "Foreign Intervention: Defending Empire or Freedom?" Each pamphlet includes editorials, editorial cartoons, discussion activities and often cassettes. The Forum is designed to teach critical thinking skills, such as recognizing an author's point of view and editorial bias. For grades 7-12. Classroom kits include 35 pamphlets and a companion discussion cassette, $29.95; library resource kits, 5 pamphlets and a cassette, $9.95.

Federal Emergency Management Agency. Protection in the Nuclear Age. The Reagan Administration's crisis evacuation plan for target cities to host cities and towns in the event of a nuclear attack. FEMA, 1725 I St. NW, Washington DC 20472. Free.

Fisher, Roger, and Ury, William. Getting to Yes. Houghton-Mifflin, New York, 1981. An excellent book on the art of negotiating.

Ford, Daniel. The Cult of the Atom: The Secret Papers of the Atomic Energy Commission. Simon and Schuster, 1982. Based upon a ten-year study of the files of the Atomic Energy Commission, by the Executive Director of the Union of Concerned Scientists. The theme of the book is that our nuclear technology has outstripped our ability to control it. $13.95.

_____, Kendall, H., Nadis, S. Beyond the Freeze: The Road to Nuclear Sanity. Beacon Press. In simple, clear language, the book covers the history of arms policy since 1945, progress in arms talks to date, and the dangers inherent in the Reagan Administration's buildup. $6.25.

The Forum Institute. Handbook: Arms Control and Peace Organizations/Activities, 1983. The Forum Institute, 1225 15th St., NW, Washington, DC 20005. An updated version of the 1982 original, this handbook is a network reference which no arms control group should be without. 130 national groups provided information about themselves in a survey conducted in November 1982 and February 1983. Each group's profile contains the name, address, contact person, number of paid staff and founding year; description of activities; a list of publications and resources; and a state by state list of affiliates and chapters. Also included is an interesting appendix which presents an overview of all included groups. $12.00.

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Freeman, Leslie J. Nuclear Witnesses: Insiders Speak Out. Norton, 1982. Workers in the nuclear industry talk about health hazards and dangers that led them to oppose the industry they worked in. $5.95.

The Freeze and Economic Issues Organizing Manual. Includes information on the impact of a freeze on economic conversion in areas of the country that have military contracts. Nuclear Freeze Campaign National Clearinghouse, 4144 Lindell Blvd., Suite 402, St. Louis, MO 63108.

Freeze It! A Citizen's Guide to Reversing the Nuclear Arms Race. A 30-page booklet. The Norwich Peace Center, Box 283, Emerson House, Norwich, VT 05055. $.50.

The Freeze Study Kit. Available from the American Friends Service Committee, RFD 1, Box 494, Voluntown CT 06384.

Friends Peace Committee. A Manual on Nonviolence and Children. Friends Peace Committee, 1515 Cherry St., Philadelphia PA 19102. Includes daily sessions, staffing, parent organization, bibliography, excellent cooperative games. $5.50.

Geyer, Alan. The Idea of Disarmament: Rethinking the Unthinkable. Brethren Press, 1982. Analyzes historical disarmament patterns and suggests options for the future. $11.95.

Gold, David. Misguided Expenditure: An Analysis of the Proposed MX Missile System. Council on Economic Priorities, 1981. A critical analysis of the strategic and economic arguments concerning the MX missile system. $7.50.

Gottlieb, Sanford. What About the Russians? S.T.O.P. Nuclear War, 11 Garden St., Cambridge MA 02138. This examination of our perceptions of the Soviets and the realities of their foreign policies is an excellent classroom book for high school students. Short and clear, it provides a balanced treatment of the subject. Sources of U.S. distrust of the Soviets and our relation with the Soviet Union are looked at. It takes a realistic look at Soviet expansionism and at their overall foreign policy goals. A comparison of foreign policy conduct and a discussion of our common interest completes this readable book. $3.

Greater Boston Physicians for Social Responsibility. Speaking Out on the Threat of Nuclear War: A Practical Guide. GB/PSR, 19 Garden St., Cambridge, MA 02138. A manual used as a course syllabus in speaker training courses. Selections include suggestions for citizen action, the process of public speaking, aids for communication. $6.00.

Ground Zero. Thinking About Preventing Nuclear War. 1982. Details six basic scenarios for how a nuclear war might start. It then examines possible firebreaks for halting the spread of such a war. This is a useful book to help high school students understand the long-term efforts necessary to prevent nuclear war.

_____. Nuclear War: What's In It for You? Pocket Books, $2.95. Also available from ESR, 23 Garden St., Cambridge, MA 02138. $4.00. This extremely readable, concise book is packed with information. An excellent resource with which high school students can begin to educate themselves on nuclear issues.

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Hersey, John. Hiroshima. Bantam Books, 1946. A classic journalistic account of the dropping of the A-bomb on Hiroshima and the events which followed. $2.25.

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Ibuse, Masuji. Black Rain. trans. from Japanese by John Bester. Kodansha International Ltd., 1969. This novel, first published in 1969, is about a family who lived through Hiroshima in 1945. $4.95.

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Kraybill, Donald B. Facing Nuclear War: A Plea for Christian Witness. Herald Press, 615 Walnut Ave., Scottsdale, PA 15683. For adult discussion groups, Sunday schools. $8.95.

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Melman, Seymour. The Permanent War Economy. Simon and Schuster, 1976. The single most important source book for understanding the military economy and conversion. $5.95.

Mattes, Kitty Campbell. In Your Hands, A Citizen's Guide to the Arms Race. Parents for Peace, 140 West State St., Ithaca, NY. A short paperback giving the history of the nuclear arms race since 1945.

Monitor. A periodical which contains detailed factual analysis of current military issues, often contradicting popular impressions. Excellent resource for secondary current events. Highly recommended. Center for Defense Information, 122 Maryland Ave., NW, Washington DC 20002.

Morrison, Phillip, Sommaripa, G., Forsberg, R., et. al. The Price of Defense: A New Strategy for Military Spending. Times Books, 1979. This book assesses our real military needs, discusses a strategy for more reasonable defense expenditures, and presents a rational analysis for a safer, future military policy. Their overview includes both general purpose forces and strategic nuclear forces, as well as the impact of their recommendations on the budget and the economy. $15.00.

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National Academy of Science. Long Term Worldwide Effects of Multiple Nuclear Weapons Detonation. National Academy of Science, 2101 Constitution Ave., Washington, D.C. 20418, 1975. Paints a grim future, especially for the northern hemisphere.

New Boston Review, December 1981. A good collection of newspaper articles on various aspects of the nuclear issue.

Nuclear Mapping Kit. Student/class project. Guides students in preparing a map of what damage would be inflicted on their communities by nuclear missiles/bombs. New Manhattan Project, 15 Rutherford Place, New York, NY 10003.

Nuclear Times. A newsmagazine on the anti-nuclear weapons movement. Wide-ranging in coverage: interviews, international issues, reviews, weapons proliferation, arms talks, civil defense and no first use. The advantage of this newsmagazine over other excellent newsletters is its currency and comprehensiveness. It also has a monthly calendar of events related to the threat of nuclear war that are going on all over the country, and a resource page of books, films and guides every month. Highly recommended. Nuclear Times, 298 5th Ave., New York, NY 10003. $12.00 per year.

"Nuclear War: The Aftermath." Ambio: A Journal of the Human Environment. Vol. XI, Nos. 2 and 3, 1982. Ambio Royal Swedish Academy of Sciences, Box 50005, S.104 05, Stockholm, Sweden. Although expensive, this is a landmark publication, appraising the ecological consequences of a nuclear war not dealt with by other resources. The book examines the medical consequences of a major nuclear conflict, including the recurrence of diseases in epidemic proportions, and the effects of a "limited" nuclear conflict which illustrates how even the most limited military use of nuclear weapons would likely result in global catastrophe. But the focus is on the consequences throughout the world for the atmosphere, food and water supplies, and human health and behavior. Effects on ocean ecosystems, vegetation, and the global economic infrastructure are analyzed thoroughly. Clearly written, rich with information, this publication is invaluable. $15.00

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Schell, Jonathan. The Fate of the Earth. Knopf, 1982. Eloquent essay on the implications of nuclear weapons for the future of the planet. This book has been called the most important book of the decade. Schell manages the impossible: to write poetically about blast waves, global epidemics, in fact, about the destruction of the planet. $11.95.

Sharp, Dr. Gene. Making the Abolition of War a Realistic Goal. Institute for World Order, N.Y., 1980. This tightly reasoned essay offers valuable descriptions on the nature of war.

Shute, Nevil. On the Beach. 1957. The classic novel which depicts the last days of the survivors of a nuclear attack in Australia.

Sivard, Ruth Leger. World Military and Social Expenditures 1982. World Priorities, Inc., Box 1003, Leesburg, VA 22075 or ESR, 23 Garden St., Cambridge MA 02138. This publication is outstanding. Sivard's research is impeccable This 44-page pamphlet documents that world-wide military costs have risen to $600 billion a minute, $100 billion of which goes to increase the nuclear weapons stockpile. Includes a fold-out chart detailing the effects of a one-megaton bomb on both Washington and Moscow. Excellent teaching resource for high school-college, adult study groups, or for self-education. $4.00.

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Stubbs, Gilbert. How Realistic is the Nuclear Freeze Proposal? American Security Council Foundation, Boston, VA 22713. A short analysis of the freeze movement and its major proposals from a conservative viewpoint. Explains why the claims of freeze proponents are based on inaccurate and misleading information. $2.00.

Talbot, Strobe, Endgame: The Inside Story of Salt II. Harper and Row, 1979. An inside account of the second round of strategic arms limitation talks, 1972-1979. $5.95.

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_____, and Smith, Dan. Protest and Survive. Monthly Review Press, New York, 1981. A broad spectrum of opinion and information on the dangers inherent in U.S. military and foreign policy and the nuclear confrontation between Washington and Moscow. $4.95.

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Traprock Peace Center. Civil Defense: Information Packet for Educators and Organizers. Traprock Peace Center, Woolman Hill, Keets Rd., Deerfield, MA 01342. Includes a range of information on many aspects of civil defense, as well as information on how to research civil defense, as well as information on what action can be taken. $5.00.

Union of Concerned Scientists. The Threat of Nuclear War: A Briefing Manual. A compendium of accurate background data on nuclear war, weapons, policy, and strategy. Includes articles on U.S.-Soviet force comparison, proliferation, false alerts, etc.

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U.N. Center for Disarmament. Fact Sheets Series. UN Center for Disarmament, New York, NY 10017.
Fact Sheet #15. South Africa's Plan and Capability in the Nuclear Field.

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Fact Sheet #18. Disarmament Week. Gives ways on how to use Disarmament Week (mid-October) to promote peace.

U.N. Dept. of Public Information. Final Document: Special Session of the General Assembly on Disarmament. Comprehensive outline of need for and steps to achieving disarmament.

U.S. Arms Control and Disarmament Agency. Maps. Free maps of 92 American cities with the effects of a one-megaton nuclear explosion superimposed.

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U.S. Dept. of Defense. Soviet Military Power. 1982. Introduction by Casper Weinberger. This is must reading for understanding the reasoning of the Reagan Administration's nuclear weapons buildup. It documents powerfully what the Administration views as a recent massive increase in armaments by the Soviets.

U.S. Dept. of State. The Nuclear Freeze. Criticism of the proposal for a bilateral U.S.-Soviet freeze on the testing, production and deployment of nuclear weapons.

Wallis, Jim, ed. Waging Peace: A Handbook for the Struggle to Abolish Nuclear Weapons. Harper and Row, 1982. Assesses biblical and theological responses to the present state of the arms race. For churches, college and seminary classes and prayer and study groups. $4.95.

"War and Peace in the Nuclear Age." Special section in the Boston Sunday Globe. 56-page magazine on the nuclear arms race and the struggle to stop it. Winner of 1983 Pulitzer Prize. October 17, 1982. Boston Globe, Morrissey Blvd., Boston, MA. $1.00.

Warbur, Jennifer, Lowe, D., eds. You Can't Hug with Nuclear Arms! Morgan and Morgan, 1982. Photos of the New York June 12th disarmament rally. $10.95.

Washington Report. American Security Council. Washington Communications Center, Boston, VA 22713. A conservative newsletter containing analysis of developments affecting the nation's security. Contributors include military and government personnel. Some recently covered topics are: "The Great Game of the 1980's: Nuclear Disarmament" and an attack on "The Nuclear Weapons Freeze Movement."

Wheeler, Harvey, and Burdick, Eugene. Fail Safe. Depicts the dilemma of an American President who must decide whether to prevent further nuclear war after an American bomber has mistakenly destroyed Moscow. Was made into a feature length film. High school - adults.

Wilmington College Peace Resource Center Newsletter. Pyle Center, Box 1183, Wilmington OH 24177. An outstanding, comprehensive newsletter concerned not only with nuclear issues, but also with global peace and justice. Includes a section called "Especially for Teachers."

Zacharias, Jerrold R., Gordon, M., Davis, S.R. Common Sense and Nuclear Peace. Education Development Center, 1983. Available from ESR, 23 Garden Street, Cambridge, MA 02138. This pamphlet describes in non-technical language the long-term demands upon us to wrest our fate from the military. The authors discuss a pre-emptive strike, deterrence, nuclear war fighting, and why "bigger is not better." Their real focus is on steps toward a non-belligerent world and how we can gird ourselves for "the long pull." Good for high school students and adult study groups. $2.00.

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GUIDES TO AUDIO-VISUAL MATERIALS

Brown, David. Nuclear Film Forum Guide. Nuclear Film Forum, 2114 Golden Gate Ave., San Francisco, CA 94118. 1982. A 28-page model program with short descriptions of 80 films. $4.00.

Dowling, John. Nuclear War Film List. Dep't. of Physics, Mansfield State College, Mansfield PA 19631. Synopses and ratings of 100 films plus ordering information. $2.00.

Educators for Social Responsibility. ESR 1983 Audio-Visual List. Annotated list of about 75 audio-visuals and sources, along with a list of guides to these materials. $2.00.

Ground Zero. Ground Zero Audio-Visual List. Ground Zero, 806 15th St., NW, Washington, D.C. 20005. Free, up to three copies.

Media Network. Guide to Disarmament Media. Available from ESR. Organizing tips, film libraries, and sources as well as an extensive list of audio-visuals. $1.00.

Shaheen, Jack. Nuclear War Films. Southern Illinois University Press, P.O. Box 3697, Carbondale IL 62901. Critiques of 24 films on nuclear war. $4.95.

AUDIO-VISUAL MATERIALS*

Acceptable Risk?: The Nuclear Age in the United States. 30-minute slideshow with 160 slides; 1980. Available from NARMIC. $15.00 rental. Explores the link between nuclear weapons and nuclear power, giving testimony from experts and victims who document the risks and propose alternatives. Challenges the audience to consider whether the risks of the atomic age are acceptable and proposes that alternatives are possible. Senior high - adults.

Alternatives to **Violence**: A Video Series. Available from Wilmington College Peace Center. 3/4" videotape, script, incl. programs 1 & 2 on one tape, 60 min., rental $20.00. Program 1 only, 30 min., rental $10.00; program 2 only, same. The Fund for the Improvement of Postsecondary Education, U.S. Dep't. of Education. Documents the history of nonviolent struggles and explores alternatives to solving conflicts by violence.

America from Hitler to MX. Produced by Joan Harvey. Available from Parallel Films. A 90-minute film available in 16mm or 1/2" or 3/4" videotape documenting the history of American industry's support of nuclear weapons and power. Film rental $115.00; videotape rental $90.00. $5.00 shipping on all orders.

The Atomic Cafe. 87-minute color 16mm film. Produced by Jayne Loader, Kevin Rafferty and Pierce Rafferty, 1982. A feature-length documentary which looks at the history of the "Atomic Age" as depicted in the American media and culture. The dropping of the atomic bombs, civil defense procedures, and the escalating arms race are all examined. Available from the Archives Project. Inquire for price. High school - adult.

The Big If. 9 min., color, 16mm. animation by Bretislav Pojar for the United Nations, 1981. Available from Journal Films. $205.00 purchase, $15.00 rental. Grade 5-adult. This colorful film poses the question: What would happen if we turned our tanks into tractors, our grenades into chickens, and our uniforms into dresses and shoes? Although it is a children's fantasy with elements of nonsense, the question is serious and the film can be used as a short before longer films for adults.

The Biology of Nuclear War. Produced by The Biology of Nuclear War Study Group, The Biological Laboratories, Harvard University, Cambridge MA 02138. Important information, grim and accurate, about short- and long-term genetic and environmental effects is presented. The feasibility of providing medical care in a nuclear emergency is also examined. The initial slides introduce some disturbing issues for which the teacher should consider providing additional support and information. Because of its length, a teacher might prefer to show this slideshow over a 2 or 3 day period, pausing for discussions. Accompanying script and teacher's manual. For high school science classes - adult. Available from Carolina Biological Supply in slide or filmstrip format. Inquire for price.

Bombs Will Make the Rainbow Break. Videotape, $25.00 rental; 16mm. color and sound film, $25.00. A documentary of the Children's Campaign for Nuclear Disarmament. Against a background of parks and activities, children speak in their own voices about their nuclear concerns and read aloud letters they have written to the President. Most useful for educators and parents rather than as a resource for children. Available from Educators for Social Responsibility.

BOOM! 11 minute color 16mm. film animated by Bretislav Pojar for the UN, 1979. The history of aggression carried into the age of atomic weapons, using only music and sound effects. Available from Journal Films. $20.00 rental.

The Buddha is Smiling. Produced by Michael Bedford. 120 slides and 25 minute cassette tape which describes U.S. involvement in nuclear weapons and power programs in southeast Asia. Purchase $65.00; rental, $20.00 for three weeks. Available from Center for Development Policy, 418 10th St., SE, Washington DC 20003.

*Addresses for distributors are to be found at the end of this list.

Button Button: A Dream of Nuclear War. This film uses myth and fantasy to create the nuclear nightmare. Originally conceived as community theatre in Strafford, VT, it has been translated into a 14-minute film by Frank Cantor and Juan Mandelbaum and produced by Cantomedia for the Center for Education and Communication. It is meant to show how a small community can contribute to stopping the nuclear arms race. The actors wear masks inspired by ancient Greek tragedies. The film action unfolds in eerie, dreamlike sequences, a surreal mix of music and mime. The emotional appeal of the film could serve to begin discussions on nuclear issues. Also available on 3/4" and 1/2" videotape. Rental, $35.00. Purchase, $310.00. Available from Cantomedia. Junior high-adult.

Children of Hiroshima. 10 min. slideshow. Available from Concerned Educators Allied for a Safe Environment (CEASE). $37.00 purchase; $12.00 rental. Excerpts of reminiscences of those who were four and five years old when the Bomb was dropped. Accompanied by art done by survivors.

Clouds of Doubt. 50 minute 3/4" videotape. Produced by KUTV in Salt Lake City, 1979. 1950's bomb tests in Nevada are examined along with the effects of radiation from these tests. The government's role in suppressing information about the dangers of radiation is questioned. Available from Electronic Arts Intermix. $75.00 rental.

Consider the Alternatives. SANE Education Fund, Robert K. Musil, Education Director. Weekly public affairs radio programs, nationally syndicated. $7.00 each, audio cassettes; $90 for entire set of 13. Includes: "Shadows of the Nuclear Age" and "American Culture and the Bomb". Available from the SANE Education Fund.

Countdown for America. Available from American Security Council Foundation. 27 min., color film, 1983. Explores the campaign for a nuclear weapons freeze as contrasted with the campaign for a national strategy of Peace Through Strength. Hosted by Charlton Heston, the film presents material which supports the belief that the Soviets have surged to military superiority while the U.S. has cut back on its defenses. Presents the views of Secretary of State Caspar Weinberger, Senator John Tower, Senator Samm Nunn, President Ronald Reagan, and others. Inquire for price.

Dark Circle. Written and directed by Chris Beaver and Judy Irving. 82 min., 16mm. color. Available from Independent Documentary Group. A film illustrating what filmmaker Judy Irving learned during her visit to Rocky Flats, Colorado, a weapons plant where workers turn out plutonium triggers for hydrogen bombs at the rate of 15 a week. A frightening, well-crafted documentary on the effect of the defense industry on ordinary citizens. The 'dark circle' of the film's title is the link between nuclear weapons and nuclear power; nuclear reactors produce plutonium, the raw material of bombs that remains radioactive for a quarter of a million years, and which is deadly poisonous to most forms of life. Inquire for price.

The Day After Trinity: J. Robert Oppenheimer and the Atomic Bomb. 90-minute color 16mm. film. Directed by Jon Else, 1981. A documentary profile of the leading scientist on the Manhattan Project which developed the first atomic weapons. Available from Physicians for Social Responsibility.

The Day of Nuclear War: A Radio Play. Barry M. Casper and Craig Mohn. 31 characters, about 45 min. For high school classroom. Posits a crisis in Saudi Arabia, the consequent evacuation of U.S. cities, the initial "limited" use of nuclear weapons by both sides, and the final moments. $5.00. Available from Nuclear War Graphics Project.

The Decision to Drop the Bomb. 82-minute black and white 16mm. film. Produced by Fred Freed for NBC, 1965. Scientists, generals, and political figures from both sides describe how the choice was made to use atomic weapons in the war against Japan. Available from Films Incorporated. $125.00.

Department of Defense. Audio Visual Division, Defense Nuclear Agency, Washington, DC 20305. Many films on the subject of nuclear weapons. Available titles include: Medical Effects of the Atomic Bomb, From Caveman to A-Bomb, Living with Nuclear Weapons. Write for complete catalogue.

Eight Minutes to Midnight. 60-minute color 16mm. film produced by Mary Benjamin, 1981. A documentary portrait of Dr. Helen Caldicott, former President of Physicians for Social Responsibility and anti-nuclear war activist. Caldicott is seen visiting nuclear weapons facilities and mining sites; also she delivers an address to fellow physicians expounding the dangers of radiation and the importance of citizen involvement with the issue. Available from Direct Cinema. $150.00.

Gods of Metal. A 27-minute 16mm documentary with a Christian perspective on the arms race. The effects of the arms race on the poor and the ability of individuals to effect change is emphasized. Available from Physicians for Social Responsibility or Maryknoll Films, Maryknoll, NY 10545. Inquire for prices. Junior high-adult.

The Ground Zero Slide Show. 76 slides and optional audio tape. Introduction to nuclear war prevention questions. Designed as a stimulus for group discussions for those new to the issue. $10.00 ($15.00 with tape). Available from Ground Zero.

Hiroshima-Nagasaki 1945. 16-minute black and white 16mm. film. Directed by Akira Iwasaki, 1945, edited 1970. Available from Wilmington College Peace Resource Center. $15.00 rental. Photographed by Japanese cameramen during the first weeks after the bombs fell on Hiroshima and Nagasaki, the footage in this film was seized by the U.S. government and kept secret for over 20 years. In stark black and white, with sparse, eloquent narration, the film portrays the bombs' aftermath in the two cities: the shadows of people and objects permanently etched into sidewalks, the gruesome burns and radiation sickness suffered by thousands of inhabitants, the vast expanses of buildings collapsed and destroyed. The film is less a historical record than a plea never to drop a bomb again. Its last words remind us that the bombs we have now are many times more powerful than those dropped on Japan.

The Hole. 15-minute color 16mm. film. Directed and animated by John and Faith Hubley, 1962. An animated film which explores the tendency to ignore the possibility of nuclear war. When an accident occurs on their worksite, two construction workers imagine that a bomb has destroyed their city. Available from Films Incorporated. $30.00 purchase.

Hostage at Hell's Bottom: The Economy and the Pentagon. 140 color slides, 19 min. cassette tape, script. Examines the effects on our economy of current levels of military spending and argues for economic conversion. Senior high-adults. $20.00 rental for 1 showing. Available from Packard Manse Media Project.

How Much is Enough? Decision Making in the Nuclear Age. Produced and directed by Andrew A. Stern, this 59-minute documentary won the 1983 George Polk Award in Journalism. Part I of this film excels; it ties the nuclear arms race into concrete decisions made by specific individuals, thus raising the key notion of individual responsibility in the historical development of the arms race. The premise of the film is that decisions about nuclear bombs have not been made rationally. The film begins with the history of why we developed nuclear weapons and the circumstances of the so-called "missile gap" in 1963. The basic format is interviews with former participants in nuclear arms issues, such as McGeorge Bundy, Maxwell Taylor, and Harold Brown. Highest recommendation for high school, college/university. Rental, $50.00 from Physicians for Social Responsibility.

The Hundredth Monkey. Made by Planetary Initiatives. The title refers to a phenomenon of collective learning observed in a monkey colony, by which the rate of learning was accelerated when the "100th monkey" performed the behavior. The film attempts to link this phenomenon with the human potential for collective learning and with action for social change. While the ideas provide hope and are provocative, the metaphor is tenuous. Nevertheless, in the 9-12 grades, the film could be useful in stimulating discussion. Inquire for price.

If You Love This Planet. Available from Direct Cinema. Approx. $45.00 per classroom showing. A 30-minute film by the Canadian Film Board featuring a speech given to community college students by anti-nuclear activist Dr. Helen Caldicott, former President of Physicians for Social Responsibility. She frames the threat of nuclear war as a medical metaphor: "We live on a terminally ill planet about to destroy itself." Because of this, argues Caldicott, nuclear weapons must be eradicated from the planet, and "we are going to have to change the priorities of our life, if we love this planet." Interspersed with the speech are film stills of the bombings of Hiroshima and Nagasaki and victims in the aftermath. This film won an Academy Award, 1983, in the best short documentary category. It also has caused an uproar because the U.S. Dep't. of Justice has branded it propaganda, required Canada to register with the U.S. government as a foreign agent, and has refused to allow the film to be shown in the U.S. unless it bears this foreign agent disclaimer. Caldicott's ability to move people to activism is unparalleled. Thus, the best use of this film is for this purpose in classroom or community. Classroom instruction should note that the film has one strong point of view.

In the Nuclear Shadow: What Can the Children Tell Us? Available from Educational Film and Video Project. Produced by Vivienne Verdon-Roe, 1983. 25-minute video-film documentary. Rental, $25.00. Based on interviews with 27 students out of 60, who express with sadness, fear, helplessness and anger their feelings about the threat of nuclear war. The film-makers' purpose is to show that children not only know more about nuclear issues than adults often assume, but also that they are deeply disturbed by the possibility of nuclear holocaust. Although the film is well done and emotionally moving, the use of children for such purposes is always a touchy issue. Discussion guide also available from 6511 Gwin Rd., Oakland CA 94611, (415) 654-6312.

In Our Backyards: Uranium Mining in the United States. 29-minute color 16mm. film. Produced by Pamela Jones and Susann Stryon. 1982. This film explores the process and health effects of uranium strip mining throughout the country. Available from Bullfrog Films. $40.00.

The Last Slide Show. Revised, 1983. This updated and revised version of the original 1977 version is one of the best slide shows available. Part of its success lies in its wide-ranging appeal and applicability, from grades 6 - adult. The show's point of view makes it unique; told from the viewpoint of someone looking back on the 20th century as a period of ancient history, the script and slides trace how nuclear weapons came into being and what happened to the societies that produced them. But the surprise ending is ultimately upbeat in a refreshing way. Highest recommendation. Available from Packard Manse Media Project. Inquire for price. Rental $20.00.

The Last Epidemic. Available from Physicians for Social Responsibility. 35-minute color 16mm. film or 1/2" or 3/4" videotape. 1981. This is a filmed presentation of a symposium held in San Francisco in 1979 by PSR and the Council for a Livable World. The speakers, prominent physicians and others concerned with arms control, describe what would happen if a modern bomb were dropped on San Francisco, and the global ecological catastrophe that would follow a nuclear war. They discuss the impracticalities of civil defense, the destructive capacities of the nuclear weapons that are now deployed, and other aspects of nuclear arms. By adding footage from U.S. government films and footage from Hiroshima, the film brings home the awesome effects of nuclear war and the steps we are taking to make it more likely. Caution is urged in the use of this film with students, even 12th graders. Its grim information can leave people with feelings of hopelessness and depression. Should never be shown without a followup discussion. Also available in a revised 21-minute version.

The Lost Generation. 20-minute color film directed by Yuten Tachibana for the Hiroshima-Nagasaki Publishing Committee. An account of the destruction of the original atomic attacks and testimony from survivors, collected from footage taken by the U.S. Strategic Bombing Survey. Available from Physicians for Social Responsibility.

Marshall Islands: America's Radioactive Trust. 25-minute slideshow. Produced by the Micronesia Support Committee. Examines the testing of nuclear weapons in the Marshall Islands atoll from 1946 to 1963. The effects of this testing on island natives and the use of natives as scientific research subjects by the U.S. Army are also scrutinized. Available from the Micronesia Support Committee.

M.A.D. (Mutual Assured Destruction): The Psychology of Nuclear Armament. 87 color slides, 17 minute cassette tape, script. Produced by Norman MacLeod and David S. Greet, M.D., Brown University Program in Medicine. Robert Jay Lifton, Jerome D. Frank, Joanna R. Macy and others discuss the psychological effects on our lives of living under the threat of Mutual Assured Destruction. Available from Physicians for Social Responsibility.

Newspiece. Sandra Marie Fluck, 746 N. Pine St., Lancaster, PA 17603. $1.50 plus postage. A creative, original, 20-page dramatic narrative that uses some surrealistic devices to juxtapose the nuclear arms issue with our culture. Effective unique approach to the issue. Especially valuable for high school English, drama, or speech courses. Can be used as an improvisational reading or as a rehearsed production.

No Frames, No Boundaries. 16mm. film purchase $250; 3/4" videotape $75; 1/2" videotape $50. This 21-minute film draws its theme from the perspective of Astronaut Russell Schweickart as he stepped into space during the Apollo 9 flight. The film explores the "frames" of reference and artificial man-made "boundaries" that exist between nations. It is useful for general and first-time audiences. Because of its positive approach to the interconnectedness of caring for the planet and for each other, providing a context for the growing concern about nuclear war, this film is recommended as a follow-up to "The Last Epidemic A well-done discussion guide accompanies the film. A curriculum guide is also available. For grades 7-12. Available from Creative Initiative.

Nuclear Nightmares. 90-minute color 16mm. film. Produced by Peter Batty for the BBC; directed by Nigel Calder, 1980. A presentation of four possible scenarios of nuclear war. Footage includes scenes of U.S., Soviet and NATO defense systems and expert examinations of military systems worldwide. Available from Corinth Films. $175.00.

Paul Jacobs and the Nuclear Gang. 60-minute color 16mm. film. Produced by Jack Willis and Saul Landau, 1979. Paul Jacobs, a political activist and journalist, died in 1978 of a rare lung cancer associated with radiation exposure. This film presents the story of his investigation of a possible Atomic Energy Commission cover-up of information about low-level radiation contamination in nuclear test sites and processing facilities. Available from Physicians for Social Responsibility. Inquire for price.

Prescription for Survival: Educational Tape Series. Spring 1983. Physicians for Social Responsibility, 5539 West Pico Blvd., Los Angeles, CA 90019. A new series of half-hour radio programs which explore the medical, psycho-social and economic aspects of the nuclear arms race and nuclear war. All tapes are $9.00 pp. except for the 15 cassette Fate of the Earth set, $106.00 pp. Titles include "Physicians Respond to the Nuclear Age", "Monitoring the Military Buildup", "Civil Defense: Security of Illusion?"

Preventing Nuclear War. 30-minute color film from the Union of Concerned Scientists addressing such questions as "Can nuclear war be limited?" "Would a conventional war in Europe escalate into global nuclear war?" and "How should U.S. defense policy be changed to lessen the threat of nuclear war?" Available from the Union of Concerned Scientists. $30.00 rental, $200.00 purchase.

Prophecy. 40-minute color film, 1982. Produced by Japan's Hiroshima/Nagasaki Publishing Committee. Footage recently purchased from the U.S. Government shows the fate of these cities and their residents. Available from Physicians for Social Responsibility. Inquire for price.

The Race Nobody Wins. Narrated by Tony Randall. 15-minute color slideshow. This presentation clearly lays out the dangers and costs of the international arms race. Taped quotes from Dwight Eisenhower, Amnesty International, and others supplement well-documented information about the funds we have spent on nuclear arms, the destructive capabilities of both superpowers, the increase in nations that have acquired nuclear weapons, and other aspects of the arms race. The slideshow comes with study and action guides as well as a bibliography of recent publications on the arms race. Rental $10.00; purchase $20.00. Available from SANE.

Sentenced to Success. 60 minute color 16mm. film. Produced by Cine Information Documents, France with the cooperation of the French Atomic Workers Union. The effects of radiation pose a danger to thousands of nuclear workers every day. This film focuses on occupational hazards at La Hague nuclear reprocessing plant on the coast of France. The plant receives nuclear wastes from around the world, salvaging elements to be re-used in other nuclear reactors. Workers talk about contamination, problems with the protective clothing they are issued, and the uncertainty of their jobs. Available for $45.00, $65.00, or $100.00 depending on its use, from Green Mountain Post Films.

There's A Nuclear War Going On Inside Me. Color videotape, obtainable on either 3/4" or 1/2" VHS format. Rental $25.00. A 21-minute overview of a joint classroom project of the International Physicians for the Prevention of Nuclear War and Facing History and Ourselves National Foundation, Inc. Adult leaders psychiatrist Eric Chivian and educator Roberta Snow explore students' reactions and thoughts concerning nuclear war and/or nuclear weapons. This tape has a calm, informative tone and is a good discussion starter. The leaders are non-directive; the discussions are open-ended. 3rd, 5th, 7th, and 9th grade classrooms are shown. Available from ESR.

Thinking Twice About Nuclear War. 30-minute color 3/4" videotape. This tape is about a middle-class American family coming to grips with the realities of the nuclear arms race and its implications for their personal security. Available for $40.00 from Syke Pictures.

The Threat of Nuclear War. 21 min., 1981. $15.00 purchase plus $5.00 shipping. Available from Nuclear War Graphics Project. An outstanding introduction to a discussion of nuclear weapons, the arms race and nuclear war. Contains 60 slides and comes with a taped narration and printed script.

The Time Has Come. 27 min., 16mm. color documentary film, 1982. About the international nuclear disarmament movement, the necessity for nuclear disarmament, and the ability of the average citizen to influence government. Purchase, $250.00 from NARMIC/AFSC. Rental, $10.00 from AFSC, 915 Salem Ave., Dayton OH 45406.

Under the Mushroom Cloud. 74 color slides, 22 min., cassette tape, script. $15.00 purchase, plus $5.00 shipping. Critically examines the revamped civil defense efforts of the present Federal Emergency Management Agency (FEMA). Reviews civil defense efforts from the "duck and cover" programs of the 1950's up to the "crisis relocation programs" of today, and critically examines the assumptions upon which these plans are based: a three-day warning period, orderly evacuation, and survival. It also lists what to take (credit cards, two to three weeks supplies); what not to take (pets, alcohol); how to dispose of dead bodies (plastic bags), etc. The tone of the slideshow is informative, rather than political. Very professionally done. Highly recommended for general classroom use in grades 7-12 and higher. Also useful as an introduction to any community's crisis relocation plan and, thus, to students researching that plan. Available from Nuclear War Graphics Project.

Unforgettable Fire: Drawings by A-Bomb Survivors. 15-minute color slideshow. Produced by the Japan Broadcasting System, 1975. A chronological account of the day the bomb fell on Hiroshima told through pictures drawn by survivors of the attack. Over 2000 drawings were collected in an open call for "pictures of the A-Bomb" put out by Japan Broadcasting Company. The pictures make an extraordinary personal account. John Hersey said about the works: "...tremendously moving -- more moving than any book of photographs of the horror could be, because what is registered is what has been burned into the minds of the survivors." Available from the Wilmington College Peace Resource Center. $5.00 purchase.

The War Game. Available from Films Incorporated. $150.00 rental. 50-minute black and white 16mm. film for the BBC, 1965. What would happen if your community were the target of nuclear attack? The War Game has become a classic enactment of nuclear holocaust, based on information supplied by experts in nuclear defense, economics and medicine. The overall mood is one of panic. A vast proportion of the population is killed immediately, while the survivors experience evacuation, hunger riots and widespread chaos. The film was banned by the BBC once it had been produced. It hits hard and should be used in conjunction with other films, leterature or speakers to keep unitiated audiences from merely feeling numbed.

War Without Winners II. Revised Version. Available from Center for Defense Information, 303 Capitol Gallery West, 600 Maryland Ave., SW, Washington, D.C. 20024. This 28-minute 16mm. film juxtaposes the views of the Administration and the military (represented by Reagan and Weinberger) and those of American and Soviet physicians and people, former military personnel such as Rickover, LaRocque, Eisenhower, and former deputy director of the CIA Herbert Scoville. The former argue that the U.S. is dangerously behind the Soviets in its nuclear arsenal; that we must rebuild American military strength and power; that a limited nuclear war can be kept limited and can be won. Conversely, Rickover, father of the nuclear navy, insists that the U.S. is "over-arming" and that we should "outlaw all nuclear weapons." Eisenhower declaims the subtle dangers of the military-industrial complex. Scoville asserts that the U.S. has always been ahead of the Soviets in military technology, still is, and that not in one single weapons category have the Soviets demonstrated strategic superiority. Two highlights are: interviews of American and Soviet citizens in factories, museums, and other ordinary places; and clips from the historic uncensored TV show in the Soviet Union in which both American and Soviet physicians speak about the nuclear arms race. The film's point of view -- "Cease this madness" -- is powerful because it is provided by former military personnel. Views of strategic defense stations in Maryland and Omaha are particularly thought-provoking. This film is suitable for high school - adult, and would be valuable for stimulating discussion in the classroom. Also available from Physicians for Social Responsibility. Inquire for price.

Who's in Charge Here? 15 min., color, 16mm. film, produced by Herb Coro; narrated by Eli Wallach, 1980. Available from Institute for World Order. $20.00, rental. Looks at the impact U.S. military spending has on our economy from a human, personal viewpoint. Argues that adequate security is possible without escalating the arms race or military spending. By rethinking our priorities, we can move toward job security and economic stability.

Whose Budget Is It Anyway? 20-minute color slide-show. This slideshow links a multitude of social issues in describing the current pattern of cut-backs in domestic spending while the military budget is increased. A variety of people explain the need for social programs and express concern over Reagan's economic policies. Available for $15 rental from NARMIC.

Women and Power in the Nuclear Age. 30-minute color 3/4" videotape. Produced by High Hopes Media, 1981. Dr. Helen Caldicott's grassroots organizing efforts are shown. Direct confrontation of those in power is advocated in order to make rapid change possible. Available from High Hopes Media. $40.00.

FEATURE LENGTH FILMS

Failsafe. Henry Fonda plays the American President who must decide whether to allow the Russians to destroy New York City in a nuclear attack to prevent full-scale nuclear war after an American bomber has mistakenly destroyed Moscow. From Audio Brandon Films, Inc.

I Live in Fear. Akiro Kurosawa, the well-known Japanese film director, offers a sensitive combination of individual psychological portraits and social comment in his treatment of the nuclear age. From Audio Brandon Films, Inc.

On the Beach. Stanley Kramer's 1959 Hollywood classic. The first big nuclear war feature, with Gregory Peck, Ava Gardner, Fred Astaire, and Tony Perkins. Romance and moral dilemmas in the final days before the nuclear fallout reaches Australia. From Audio Brandon Films, Inc.

Panic in Year Zero. Ray Milland and Frankie Avalon star as Los Angeles is leveled in a nuclear attack. Milland, a gentle sort, realizes that violence is the only way to survive in the post-attack lapse into barbarism in the L.A. suburbs. This now camp classic documents the hysteria of the late 1950's-early 1960's fallout shelter craze. From Audio Brandon Films.

A Thousand Cranes: The Children of Hiroshima. A personal look at the children of Hiroshima from the noted author of children's books, Betty Lifton. From Audio Brandon Films.

RECORDS

"The Atomic Cafe." Album soundtrack of the 1982 film by the same name. Features early songs about atomic bombs. The Archives Project, 4717 Arlington Blvd., Arlington, VA 22203. $7.50

"Speed of Light." Holly Near. Redwood Records, 476 West MacArthur Blvd., Oakland, CA 94609.

DISTRIBUTORS

Most organizations renting audio-visual materials require telephone reservation or confirmation in advance. Prices are for rental unless indicated as purchase price.

AFSC/NARMIC, 1501 Cherry St., Philadelphia, PA 19102. (215) 241-7175.

American Security Council Foundation, Boston, VA 22713.

The Archives Project, P.O. Box 438, Canal Street Station, New York, NY 10013.

Audio Brandon Films, Inc., 34 MacQueston Pkwy., Mt. Vernon, NY 10550. (914) 664-5051.

Bullfrog Films, Oley, PA 19547. (215) 779-8226.

Cantomedia, P.O. Box 315, Franklin Lakes, NJ 07417. (201) 891-8240.

Carolina Biological Supply, 2700 York Ave., Burlington, NC 27215.

CEASE, c/o Peggy Schirmer, 17 Gerry St., Cambridge, MA 02138.

Corinth Films, 410 E. 62nd Street, New York, NY 10021. (212) 421-4770.

Creative Initiative, 222 High St., Palo Alto, CA 94301.

Direct Cinema, P.O. Box 315, Franklin Lakes, NJ 07417. (201) 891-8240.

Educational Film and Video Project, 1725B Seabright Ave., Santa Cruz, CA 95062. (408) 427-2624.

Educators for Social Responsibility, 23 Garden St., Cambridge, MA 02138. (617) 492-1764.

Electronic Arts Intermix, 84 5th Avenue, New York, NY 10011. (212) 989-2316.

Films, Inc., 1144 Wilmette Ave., Wilmette, IL 60091. (312) 256-4730.

Green Mountain Post Films, P.O. Box 229, Turners Falls, MA 01376. (413) 863-4754.

Ground Zero, 806 15th St., NW, Washington DC 20006.

High Hopes Media, 233 Summit Ave., East, Seattle, WA 98102. (206) 322-9010.

Independent Documentary Group, 394 Elizabeth St., San Francisco, CA 94114.

Institute for World Order, 777 UN Plaza, New York, NY 10017. (212) 490-0010.

Journal Films, 930 Pitner, Evanston, IL 60202. (312) 328-6700.

Micronesia Support Committee, 1212 University Ave., Honolulu, HI 96826. (808) 942-0437.

Nuclear Film Forum, 2114 Golden Gate Ave., San Francisco, CA 94118. (415) 929-0766.

Nuclear War Graphics Project, 100 Nevada St., Northfield, MN 55057.

Packard Manse Media Project, Box 450, Stoughton, MA 02072. (617) 344-9634.

Parallel Films, 314 W. 91st St., New York, NY 10024. (212) 580-3888.

Physicians for Social Responsibility, 639 Massachusetts Ave., Cambridge, MA 02139. (617) 491-2754. Accepts audio-visual orders by telephone only.

Pyramid Films, P.O. Box 1048, Santa Monica, CA 90406. (213) 828-7572.

SANE Education Fund, 5808 Greene St., Philadelphia PA 19144.

Skye Pictures, 1460 Church St., Washington, DC 20055. (202) 265-7846.

Survivors Film Project, 1765 Sutter St., San Francisco, CA 94115.

Union of Concerned Scientists, 26 Church St., Cambridge, MA 02238.

Wilmington College Peace Resource Center, Box 1183, Pyle Center, Wilmington, OH 45177. (513) 382-5338.

ORGANIZATIONS DEALING WITH NUCLEAR ISSUES

1) Arms Control/Disarmament
2) Conflict Resolution
3) Children's/Students' Groups
4) Economic/Conversion Issues
5) Educational Groups
6) International Groups
7) International Policy
8) Legislative Issues
9) Media Sources
10) Military Issues
11) Peace Education Sources
12) Professional/Career Groups
13) Psycho-Social Issues
14) Environmental Issues
15) Global Education Sources
16) Religious/Ethical Issues
17) Resource/Research Centers
18) Science Issues
19) Security Issues
20) U.S. Government Agencies
21) Women's Groups

ORGANIZATIONS DEALING WITH NUCLEAR ISSUES

1) Arms Control/Disarmament

Arms Control Association, 11 Dupont Circle, NW, Washington DC 20036. A nonpartisan national membership organization dedicated to promoting public understanding of effective policies and programs in arms control and disarmament. They participate in joint ventures with the Carnegie Endowment for International Peace and publish a monthly newletter, "Arms Control Today."

The Arms Control and Disarmament Program, Stanford University, Palo Alto, CA.

Blacks Against Nuclear War, 3728 New Hampshire Ave., NW, #202, Washington DC 30010.

Citizens Against Nuclear War (CAN), 1201 16th St. NW, Washington DC 20036. Coalition of national membership organizations concerned with nuclear issues.

Mobilization for Survival, 727 Massachusetts Avenue, Cambridge MA 02139. A national coalition of organizations and individuals committed to the elimination of nuclear weapons.

SANE, 711 G Street SE, Washington DC 20003. Runs educational campaigns for both nuclear disarmament and the conversion of military-oriented industry to peaceful purposes.

2) Conflict Resolution

The Center for Conflict Resolution, 731 State Street, Madison WI 53703. Conducts workshops and conferences on the subject.

Center for Peace and Conflict Studies, Wayne State University, 5229 Cass Ave., Detroit MI 48202. Maintains a library and conducts programs on war and international conflict.

3) Children/Student Groups

Children's Campaign for Nuclear Disarmament, R.D. 1, Box 346, Chaddsford PA 19317. Initiated a children's letter-writing campaign opposing the nuclear arms race.

Children's Creative Response to Conflict, Box 271, Nyack NY 10960. Provides training to teach conflict-solving techniques in the classroom.

Concerned Educators Allied for a Save Environment (CEASE), c/o Peggy Schirmer, 17 Gerry Street, Cambridge MA 02138. Arranges forums and discussions on nuclear issues within the early childhood community.

Council on Interracial Books for Children, 1841 Broadway, New York NY 10023.

International Student Pugwash, I.S.P Center, 305 Massachusetts Ave., NW, Washington DC 20002. Educational outgrowth of Pugwash movement for high school and college students on issues in science and society, especially those raised by nuclear armaments.

Kids' Outreach, c/o National Mobilization for Survival, 853 Broadway, Suite 2109, New York NY 10003. Group of students concerned with the threat of worldwide militarism, both conventional and nuclear.

Non-Violence and Children's Program, 1515 Cherry St., Philadelphia PA 19102.

Parenting in a Nuclear Age, c/o BANANAS, 6501 Telegraph Ave., Oakland CA 94601.

Parents and Friends for Children's Survival, c/o Carl Stein, 20 W. 20th Street, New York NY 10011. Works to reduce the possibility of nuclear confrontation, with a special emphasis on children's issues.

Peace Child Foundation, Suite 1126, 1346 Connecticut Ave., Washington DC 20036.

Student/Teacher Organization to Prevent Nuclear War (STOP Nuclear War), Box 232, Northfield MA 01360. A nationwide organization of high school students and teachers committed to informing their local school communities of the dangers of the nuclear arms race.

United Nations Children's Fund, 866 UN Plaza, New York NY 10011. Offers resources including games, displays, books, slides -- of special interest is Kit #6: An Approach to Peace Education, for ages 9-13.

United Campuses to Prevent Nuclear War (UCAM), 1346 Connecticut Ave., Washington DC 20036. Sanford Gottlieb, Executive Director. A national organization of college faculty and students active in educating about the threat of nuclear war.

Young Americans for Freedom, Route 1, Box 1002, Woodland Road, Sterling VA 22170. Young people's group which promotes a strong national defense.

4) Economic/Conversion Issues

Council on Economic Priorities, 84 5th Ave., New York, NY 10011. Established to disseminate unbiased and detailed information on the practices of U.S. corporations which have a profound impact on the quality of American life. Works to ensure corporate responsibility.

Impact, 100 Maryland Ave., NE, Washington, DC 20002. Network of individuals focusing on military spending and employment.

Jobs with Peace, 77 Summer St., Boston MA 02110. A nationwide effort to redirect federal priorities away from military spending in order to meet human needs.

Nuclear Weapons Facilities Project, 1660 Lafayette St., Denver CO 80218. Coordinates activities to convert nuclear weapons production facilities to peacetime production.

5) Educational Groups

American Civil Defense Association, Journal of Civil Defense, P.O. Box 910, Starke, FL 32091. Publishes the Journal of Civil Defense which presents information relating to civil defense, the survival of free government, the United States, and peace in the nuclear age. For the non-technical reader. Also publishes The American Civil Defense Association Alert, a bi-monthly newsletter.

American Security Council Foundation, Boston, VA 22713. Education institution which seeks to inform "...how a free society can meet the Communist challenge."

Center for Defense Information, 303 Capitol Gallery W., 600 Maryland Ave., SW, Washington DC 20024. A project of The Fund for Peace, CDI is a non-partisan research organization that provides objective analyses of U.S. military programs for members of Congress and other top decision makers, the news media, key opinion leaders, and private individuals throughout the U.S. The Center supports a strong defense, but opposes excesses and waste in military spending and programs that increase the danger of nuclear war. They publish an excellent newsletter Monitor and have produced the film "War Without Winners."

Council for a Livable World, National Office: 11 Beacon St., Boston MA 02108. Legislative Office: 100 Maryland Ave., NE, Washington DC 20002. A national group dedicated to the prevention of nuclear war through political activity and public education. In addition to publishing books and pamphlets, the Council has formed a Speakers Bureau of physicists, chemists, physicians, arms control specialists, and political scientists.

Ground Zero, 806 15th St., NW, Suite 421, Washington, DC 20005. Provides educational programs around the country on the prevention of nuclear war. Offers prolific and valuable educational resources.

6) International Groups

Avon Peace Education Project, 10 Clifton Vale, Bristol, BS8, England.

Canadian Coalition for Nuclear Responsibility, Box 236, Snowden Post Office, Montreal, Quebec, Canada. Concerned with making Canada a nuclear weapons-free country.

Canadian Disarmament Information Service, 10 Trinity Square, Toronto, Ontario, Canada M5G 1B1. An information clearinghouse and resource center.

Canadian Medical Coalition for the Prevention of Nuclear War, Box 2000, Station A, 1200 Main St. West, Hamilton, Ontario, Canada L8N 375.

Disarmament Campaigns, Ann Paulownaplein 3, The Hague, The Netherlands. Offers a monthly magazine of information on disarmament movements in Europe and the U.S.

Glasgow Teachers for Peace, Katy Campbell, 337A Albert Drive, Glasgow, G4L, Scotland.

Introducing the World, 252 Bloor St. West, Toronto, Ontario M5S 1V6, Canada. A non-partisan global education program.

Operation Dismantle, Box 3887, Station C, Ottawa, Canada K1Y 4M5. Promotes the idea of a global referendum on disarmament in the UN General Assembly.

People for Nuclear Disarmament, PO Box 132, Carlton, S3053, Australia. International Student Pugwash, I.S.P. Center, 305 Massachusetts Ave., NE, Washington, DC 20002. Educational outgrowth of Pugwash movement for high school and college students on issues in science and society, especially those raised by nuclear arms.

Public Education Resource Center, 1111 6th Avenue, New Westminster, B.C., Canada.

SUMA (Pupits ag n. weap) c/o Nei til Atomuapen, Youngs gt. 7, Oslo 1, Norway.

Teachers for Peace Action, 5911 McDonald St., Vancouver, B.C. V6N 1E4.

Teachers for Nuclear Disarmament, c/o Teachers Union, 150 Adelaide Terrace, Perth 6000, Australia.

Teachers for Nuclear Disarmament, c/o People for Nuclear Disarmament, P.O. Box 132, Carlton, S3053, Australia.

Teachers for Peace, Campaign for Nuclear Disarmament, 11 Goodwin St., London, W4, England or 42 York Rise, London, NW5, 1SB, England.

Victorian Association for Peace Studies, 20 Carnarvon Rd., S. Caulfield, Victoria 3161, Australia.

U.S. Committee for UNICEF, 331 E. 38th St., New York, NY 10011.

World Peacemakers, 2025 Massachusetts Ave., NW, Washington DC 20036.

7) International Policy

Center for Development Policy, 418 10th St., SE, Washington, DC 20003. Research organization that examines what the US and international lending institutions are doing in developing countries.

Center for International Policy, 120 Maryland Ave., NE, Washington DC 20002. Center analyzes human rights in developing countries.

Committee on the Present Danger, 1800 Massachusetts Ave., NW, Washington DC 20036. Focuses on nuclear issues in regard to international policy. Many members of the Reagan Administration belong to this organization.

Foreign Policy Association, 205 Lexington Ave., New York, NY 10016. Provides a nationwide foreign affairs program to the general public on major issues of concern to the country. Non-partisan.

Project on Foreign Policy Governance in the US, Aspen Institute, 2010 Massachusetts Ave., NW, Washington DC 20036. Conducts conferences on US-Soviet relations.

8) Legislative Issues

Friends Committee on National Legislation, 245 Second St., NE, Washington, DC 20002. Lobbies on military budget and national priorities with focus on disarmament.

Friends of the Earth, 530 7th St., NE, Washington DC 20003. Through its nine regional offices FOE lobbies for a bilateral freeze and a phase-out of nuclear power plants.

Mid-America Conservative Political Action Committee, 49 E. Main St., Marlborough MA 01752.

SANE Rapid Response Network, 711 G St., SE, Washington, DC 20003. A phone network which reports on the status of arms control legislation in Congress.

9) Media Sources

Creative Initiatives Foundation, 222 High St., Palo Alto, CA 94301.

Future Generations, PO Box 404, Andover, MA 01810. Media project of the Merrimack Valley Clamshell Alliance. Provides audio-visuals without cost to the New England area.

In the Public Interest, 303 Capital Gallery West, 600 Maryland Ave., SW, Washington DC 20024. Offers radio commentaries on the economy and war and peace questions.

Packard Manse Media Project, PO Box 450, Stoughton MA 02072.

See also the "Audio-Visual Resources" section.

10) Military Issues

American Conservative Union, 38 Ivy St., SE, Washington, DC 20003. Seeks to further the cause of conservatism, especially in military policy.

Coalition for a New Foreign and Military Policy, 120 Maryland Ave., NE, Washington DC 20002. Unites 47 national religious, labor, peace, research and social action organizations working for a non-interventionist and demilitarized U.S. foreign policy.

Conservatives Against Liberal Legislation, 5707 Seminary Rd., Suite 308, Falls Church, VA 22041. Individuals and corporations interested in strong national defense.

National Action/Research on the Military/Industrial Complex (NARMIC), American Friends Service Committee, 1501 Cherry St., Philadelphia PA 19102. Provides wide range of material on military, government, and war industry.

Project on Military Procurement, 201 Mass. Ave., NE, Suite 402, Washington DC 20002. This project explores waste and fraud in the Pentagon budget.

11) Peace Education Sources

Center for Peace Studies, The University of Akron, Akron, OH 44325. College-level programs and newsletter which give an overview of the general approaches to peace education.

Center for Peace and Conflict Studies, Wayne State University, 5229 Cass Ave., Detroit MI 48202. Maintains a library and conducts programs on war and international conflict.

Concerned Educators Allied for a Safe Environment (CEASE), c/o Peggy Schirmer, 17 Gerry St., Cambridge MA 02138. Arranges forums and discussions on nuclear issues within the early childhood community.

Fund for Peace, 345 E. 46th St., New York NY.

Intercommunity Center for Justice and Peace, 20 Washington Square, New York, NY 10011. Catholic organization oriented to Peace Education in parochial schools.

Jane Addams Peace Association, 1213 Race St., Philadelphia PA 19107.

Peace Education Committee, Boston Theological Institute, 210 Herrick Road, Newton Center MA 02159. Focusus on the theology of peacemaking.

Peace Education Resources, 1501 Cherry St., Philadelphia PA 19102. Friends Service Committee resource center for disarmament, human rights, global justice.

United Ministries in Education: Peacemaking, Militarism, and Education Program, c/o Betty Reardon, Box 171, Teachers College, Columbia University, New York, NY 10027. Offers resources for the institution of peace education studies at all educational levels.

United Nations Children's Fund, 866 UN Plaza, New York, NY 10011. Offers resources including games, displays, books, slides -- of special interest is Kit #6: An Approach to Peace Education, for ages 9-13.

World without War Council, 67 E. Madison, Suite 1417, Chicago IL 60603. Publishes many resources for teachers.

12) Professional/Career Groups

Artists for Survival, 144 Moody St., Waltham, MA 02154.

Business Executives for National Security, 21 Dupont Circle, NW, 4th Floor, Washington DC 20036.

Business Executives Move for New National Priorities, 901 Howard St., Baltimore MD 21202. An organization which opposes excessive military spending and works to promote economic conversion.

Communicators for Nuclear Disarmament, 44 Hunt St., Watertown MA 02172. Association of artists, public relations specialists and other communicators working on arms control projects.

Educators for Social Responsibility, 23 Garden St., Cambridge MA 02138. National membership/ chapter network and resource center educating for a world free from the threat of nuclear destruction.

Federation of American Scientists, 307 Mass. Ave. NE, Washington, DC 20002. Licensed to lobby in the public interest. Natural and social scientists and engineers who are concerned with problems of science and society. FAS operates the Nuclear War Education Project, which publishes the newsletter Countdown.

High Technology Professionals for Peace, 639 Massachusetts Ave., Cambridge MA 02139. Purpose is to help engineers and scientists to find alternative employment from military and defense industries.

International Physicians for the Prevention of Nuclear War, 635 Huntington Ave., 2nd Floor, Boston MA 02115. Seeks to alert physicians in all countries to the threat posed by nuclear weapons. Provides information to the public which shows that physicians would be unable to provide adequate health care in the case of a nuclear war.

Lawyers Alliance for Nuclear Arms Control, 43 Charles St., Suite 3, Boston MA 02114.

Lawyers Committee on Nuclear Policy, Inc., 777 United Nations Plaza (5th Floor), New York, NY 10017.

Physicians for Social Responsibility, 639 Massachusetts Avenue, Cambridge MA 02139. An organization of doctors committed to professional and public education on the medical dangers of nuclear weapons and nuclear war. As a national resource center, PSR distributes their own books, publications, newsletter, special pamphlets, reprints and selected audio-visual materials.

Psychologists for Social Responsibility, Suite 216, 1841 Columbia Rd., NW, Washington DC 20009.

Social Workers for Peace, 14 Beacon St., Rm. 409, Boston MA 02108.

Union of Concerned Scientists, 26 Church St., Cambridge MA 02238. An organization of scientists, engineers, and other professionals concerned about the impact of advanced technology on society. UCS has conducted independent studies on a range of questions related to nuclear energy, nuclear power plant safety, and nuclear weapons.

13) Psycho-Social Issues

A Center to Prevent Nuclear Annihilation, PO Box 837, El Granada, CA 94018. Conducts workshops to enable people to take on nuclear issues as an emotional disturbance.

Interhelp, 330 Ellis St., #505, San Francisco CA 94102. Sponsors workshops in dealing with psycho-social aspects of the nuclear arms race.

Parenting in a Nuclear Age, c/o BANANAS, 6501 Telegraph Ave., Oakland CA 94609.

Waking Up in the Nuclear Age, Box 23, Fort Mason Center, San Francisco, CA 94123. Organization of psychotherapists focusing on nuclear issues within the family.

14) Environmental Issues

Environmental Policy Center, 307 Pennsylvania Ave., SE, Washington DC 20003. Focuses on the hazards of the nuclear industry in general, including some emphasis on the weapons industry.

15) Global Education Sources

American Committee on East/West Accord, 227 Massachusetts Ave., NE, Suite 300, Washington DC 20002. A group seeking to reduce US-Soviet tensions via shared science, culture, and trade.

Global Education Associates, 552 Park Ave., E. Orange, NJ 07017. Education network for peace. Publications, newsletter, consulting, speakers, etc.

Global Perspectives in Education, 218 E. 18th St., New York, NY 10003.

Institute for World Order, 777 UN Plaza, New York NY 10017. Supplies information and curricular materials to colleges and universities.

16) Religious/Ethical Issues

The American Friends Service Committee, 1501 Cherry St., Philadelphia PA 19102. A Quaker organization which supports peace efforts through their regional offices.

Center for Jewish Renewal, 7041 McCallum St., Philadelphia PA 19119. Addresses the nuclear threat as a Jewish issue.

The Christophers, 12 E. 48th St., New York, NY 20027. A Catholic education organization in favor of disarmament.

Church League of America, 422 N. Prospect St., Wheaton IL 60187. Opposes "...peace groups and other international groups..." especially in religious organizations and the United Nations.

Eagle Forum, Box 618, Alton IL 62002. Spiritually motivated women's group supporting pro-nuclear ideas.

The Fellowship of Reconciliation, Box 271, Nyack NY 10960. Has local and regional disarmament programs throughout the country. Publishes Fellowship. Also has resources of books, pamphlets, films, slide shows, information packets, and a list of speakers.

The Institute for Peace and Justice, 2913 Locust St., St. Louis MO 63103. An ecumenical alliance which seeks to help families deepen their commitment to integrating family life and social ministry.

Intercommunity Center for Justice and Peace, 20 Washington Square, New York NY 10011. Catholic organization oriented to Peace Education in parochial schools.

Interfaith Center to Reverse the Arms Race, 132 N. Euclid Ave., Pasadena CA 91101. Educational resource center for clergy and laity.

National Christian Action Coalition, 5515 Cherokee Ave., Suite 306, Alexandria VA 22312. Lobbying group which works for legislation in opposition to the nuclear freeze.

New Jewish Agenda, 865 Broadway, New York, NY.

Pax Christi Center, 34 E. 9th St., Erie PA 16503.

Peace Education Committee, Boston Theological Institute, 210 Herrick Road, Newton Center MA 02159. Focuses on the theology of peacemaking.

Promoting Enduring Peace, PO Box 103, Woodmont CT 06460. A religious and educational organization. They have a literature list and will send articles free of charge except for postage.

Riverside Church Disarmament Program, 490 Riverside Drive, New York, NY 10027. The program disseminates information to religious groups nationwide and organizes in the New York City area in support of a bilateral freeze and disarmament.

St. Joan Peace Institute, Box 618, Alton IL 62002. Religious committee of Eagle Forum, the main purpose of which is to counter the pro-freeze influence of some religious institutions.

17) Resource/Research Centers

Consortium on Peace Research, Education and Development (COPRED), Center for Peaceful Change, Kent State University, Kent OH 44242. Offers information on peacemaking and teaching skills, course curricula and syllabi for theological schools and university level; resources for teachers K-12; directory of 30 colleges, universities, and seminaries offering peace studies programs.

Institute for Defense & Disarmament Studies, 2001 Beacon St., Brookline MA 02146. A research center which seeks to educate the public about military forces and disarmament by answering requests for information, publishing research, and making its library available to interested persons.

Institute for World Order, 777 UN Plaza, New York, NY 10017. Supplies information and curricular materials to colleges and universities.

Interfaith Center to Reverse the Arms Race, 132 N. Euclid Ave., Pasadena CA 91101. Educational resource center for clergy and laity.

Nuclear Free America, 2521 Guildford Avenue, Baltimore MD 21218. A non-profit clearinghouse for the establishment of nuclear free zones.

Nuclear Information and Resource Service (NIRS), 1346 Connecticut Ave., NW, Washington DC 20036. NIRS is a national clearinghouse and networking center for nuclear power and waste information and also publishes information on nuclear weapons. They offer a newsletter, networking services, fact sheets, Legislative Alerts, and a toll-free Information Line.

Nuclear Weapons Freeze Campaign National Clearinghouse, 4144 Lindell Blvd., Suite 404, St. Louis MO 63108. The clearinghouse monitors freeze activity nationwide and maintains a comprehensive list of local freeze organizers.

Peace Education Resources, 1501 Cherry St., Philadelphia PA 19102. Friends Service Committee resource center for disarmament, human rights, global justice.

Traprock Peace Center, Woolman Hill, Keets Rd., Deerfield MA 01343. Comprehensive resources for schools, places of worship, and communities, including films and a valuable flip chart for use by speakers.

United Ministries in Education: Peacemaking, Militarism, and Education Program, c/o Betty Reardon, Box 171, Teachers College, Columbia University, New York NY 10027. Offers resources for the institution of peace education studies at all educational levels.

Wilmington College Peace Resource Center, Pyle Center, Box 1183, Wilmington OH 45177.

18) Science Issues

High Frontier, 1010 Vermont Ave., NW, Suite 1000, Washington DC 20005. Group interested in developing nuclear deterrent capabilities in space.

International Student Pugwash, I.S.P. Center, 305 Massachusetts Ave., NE, Washington DC 20002. Educational outgrowth of Pugwash movement for high school and college students on issues in science and society, especially those raised by nuclear arms.

Science for the People, 897 Main St., Cambridge MA 02139. An outreach organization trying to make science responsive to human needs.

19) Security Issues

American Security Council Foundation, Boston VA 22713. Educational institution which seeks to inform "...how a free society can meet the Communist challenge."

Committee for National Security, 1742 N St., NW, Washington DC 20036. Has a Global Task Force, women's leadership conference and other programs to educate citizens about the meanings of national security.

20) U.S. Government Agencies

Center for Strategic and International Studies, 1800 K Street, NW, Washington DC 20002.

Federal Emergency Management Agency, 500 C St., SW, Dept. P, Donohoe Bldg., Washington DC 20472.

U.S. Arms Control and Disarmament Agency, Washington DC 20250.

U.S. Department of Defense, Washington DC 20301.

U.S. Department of Energy, Office of Consumer Affairs, Room 8G082, Washington DC 20585. Publication: The Energy Consumer.

U.S. Department of State, Bureau of Public Affairs, Office of Public Communication, Editorial Division, Washington DC 20526.

21) Women's Groups

PEACE LINKS -- Women Against Nuclear War, 723-1/2 8th St., SE, Washington DC 20003. PEACE LINKS was created to foster awareness and increase participation among women and families at the community, state, national and international levels on the issues of nuclear war, the arms race and the alternative proposals for a world at peace.

Women's Action for Nuclear Disarmament (WAND), Box 153, New Town Branch, Boston, MA 02258. Founded by Dr. Helen Caldicott, WAND is a political action committee formed as a single-issue organization to work toward ending the nuclear arms race.

Women's International League for Peace and Freedom (WILPF), 1213 Race St., Philadelphia PA 19107. With 120 branches, WILPF supports a bilateral freeze through its STOP THE ARMS RACE campaign.

APPENDICES

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UNION OF CONCERNED SCIENTISTS 26 Church Street • Cambridge, Massachusetts 02238 • (617) 547-5552

NUCLEAR WEAPONS AND NUCLEAR WAR: A STUDY GUIDE

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INTRODUCTION

For the last 35 years, the human race has lived with a day to day threat of nuclear annihilation. The resultant widespread anxiety has increased with current defense policies and statements about survivability and "limited" nuclear war. It is common knowledge that the United States and the Soviet Union have the capability to destroy eachother's population and industry. The potential long-term consequences for the planet are also relatively well known, including the dangers of radiation and the potential destruction of the ozone layer. However, many defense and arms control issues are not well understood. Frequently, important issues are surrounded by impenetrable jargon and obscured by opinions that are stated as facts.

This primer is an introduction to the arms race and nuclear issues. It is designed to provide basic information for an adult without an extensive technical background, who wants to understand the nature and potential consequences of nuclear war. The unit consists of eight sections, each of which deals with a subject area that may be considered in sequence or independently of the others.

The guide begins with background information on the nature and effects of nuclear weapons. It is followed by sections dealing with the history of the arms race, comparative measures of the military strength of the US and the USSR, and descriptions of the strategic policies that have served as the basis for nuclear deterrence. These four sections contain the basic material needed to understand the arms race and the positions of the US and the USSR. The next three sections provide more depth, including an explanation of the US strategic warning network, a description of new weapons systems and technological developments, and an assessment of the economic trade-offs inherent in military expenditures. The last section examines various arms control proposals, ranging from treaties now in effect to proposals that have not yet been negotiated.

For the reader who is interested in studying the entire unit, the suggested order is as follows:

I. Weapons effects and background information on nuclear weapons
II. Chronology of the arms race
III. Comparisons of military strength; who's ahead
IV. Strategic policy
V. Close calls and mistakes
VI. New weapons systems and developments
VII. Economic trade-offs
VIII. Solutions, treaties, and verification issues

Each section consists of an introduction to the issue, a set of questions for investigation or discussion, and suggested readings. Many of these issues are highly complex and technical; wherever possible, the readings emphasize less technical material. There is no suggested schedule for completion of the unit. The amount of time needed to gain a basic understanding of the issues will vary greatly, largely dependent upon the reader's level of interest and initial knowledge.

I. WEAPONS EFFECTS AND BACKGROUND INFORMATION ON NUCLEAR WEAPONS

In order to understand nuclear war, it is first necessary to comprehend the nature of nuclear weapons. There are several major differences between nuclear and conventional weapons. In conventional exposives, energy is released as a result of chemical reactions. In nuclear weapons, energy is released through the fission or fusion of atomic nuclei, capable of producing thousands of times more force than conventional explosives. Nuclear explosives require considerably less mass than conventional explosives to produce the same amount of energy. In addition, nuclear explosives produce far greater thermal effects, including sizeable "fire storms." Finally, nuclear explosions produce substantial immediate and long-term radiation dangers.

The first nuclear weapons (atomic bombs) were fission weapons, in which the fundamental reaction involved the splitting of an atomic nucleus. This reaction produced a great deal of energy; substantially more than with a traditional chemical reaction. For example, the complete fission of a pound of uranium or plutonium would release explosive energy equivalent to about 8000 tons of conventional explosives (TNT).

Further development of nuclear weapons led to a different principle in order to more efficiently produce even more massive amounts of energy. These weapons (hydrogen bombs) use fusion, or the merging of two nuclei, as the basis for the explosion. At very high temperatures, the two nuclei unite to form the nucleus of a heavier atom, a proce s that results in the release of substantial amounts of energy. For example, the fusion of all of the nuclei in a pound of the hydrogen isotope deuterium would release energy equivalent to about 26,000 tons of TNT.

For comparison, the A-bomb dropped on Hiroshima had an explosive force equivalent to 13 kilotons of TNT. Modern warheads such as those on a Minuteman III missile (which carries 3 warheads per missile) carry warheads with an explosive force of 350 kt, more than 25 times that of the Hiroshima bomb. The total explosive force of all of the conventional weapons used during World War II was approximately 2 megatons. Just two Minuteman III missiles equipped with the new Mark 12A warheads carry more than 2 megatons of explosive force.

QUESTIONS

What is a nuclear weapon? What is the difference between an A-bomb and an H-bomb? How do nuclear weapons work? How were they developed? What are the cases of actual use of such weapons? How do modern weapons compare with those dropped on Hiroshima and Nagasaki? What are the short and long-term effects of any use of nuclear weapons?

READINGS

Kevin Lewis, "The Prompt and Delayed Effects of Nuclear War," Scientific American, July 1979.

Michael Riordan, ed., The Day After Midnight, (Palo Alto, California: Cheshire Books) 1982.

Jonathan Schell, The Fate of the Earth, (New York: Alfred A. Knopf) 1982, Part I.

Samuel Glasstone and Philip J. Dolan, The Effects of Nuclear War, 3d ed. (Washington, D.C.: GPO) 1977, pp. 1-11.

II. CHRONOLOGY OF THE ARMS RACE

In order to understand the nuclear arms race, we must examine both past and current actions of the major nuclear powers. By analyzing the major weapons choices and the ways in which the nuclear arms race has escalated, we may be able to prevent further escalation. The arms race itself is a symptom of a larger problem of misperception, over-reaction, and mistrust. Only by comprehending this more general problem will we be able to reach constructive solutions.

The arms race has evolved out of a set of key weapons decisions, each of which has prompted a reactive response from the other side. Important developments included the following:

1945	US tested the first atomic bomb, "Trinity", at Alamagordo, New Mexico, July 16
	US dropped an atomic bomb on Hiroshima, August 6
	US dropped an atomic bomb on Nagasaki, August 9
1949	Soviet Union tested its first atomic bomb
1952	US tested its first hydrogen device
1953	Soviet Union tested its first hydrogen device
1957	Soviet Union conducted first full-range ICBM test
1958	US conducted first test of Atlas ICBM
1960	US launched first Polaris missile from submerged submarine
1964	Chinese detonated their first nuclear weapon
1968	US tested MIRV warhead
	Soviets launched their first nuclear powered missile submarine
1970	US began to deploy MIRV'ed ICBMs
1971	MIRV'ed Poseidon SLBMs operational
1973	Soviets conducted their first tests of MIRV'ed warheads
1975	Soviets began to deploy MIRV'ed ICBMs
1978	First Soviet MIRV'ed SLBM operational
1980	First Trident missile submarine enters US fleet
1982	US bombers equipped with long-range air launched cruise missiles (ALCMs)

QUESTIONS

What major choices have escalated the arms race? How many countries possess nuclear weapons? Did they all go through the same stages of development? What are the prospects for additional countries joining the "nuclear club"? With respect to major developments (including but not limited to ICBMs, SLBMs, MIRV, and ABM), which country has been the first to develop and/or deploy the system? Was there a bomber gap in 1955? A missile gap in 1960? How accurate were past assessments of Soviet weapons developments? What is the significance of the development of MIRV? What is the likely impact on the arms race of the deployment of advanced systems including the American MX, Trident II, and cruise missiles, or the Soviet SS-18 and SS-19 ICBMs?

III. COMPARISONS OF MILITARY STRENGTH; WHO'S AHEAD?

Analysts, academics, and politicians often compare US and Soviet force levels in order to determine which country has an advantage over the other. These comparisons assess the extent or seriousness of the national security threat posed by the other country. While it is important to understand the nature of US and Soviet military forces, it is essential to recognize the limitations of certain types of analysis. Analysis of US and Soviet forces frequently involves static or fixed comparisons, based on the number of missiles, warheads, or amount of explosive material each side possesses. However, such analysis fails to take into account the uses of these weapons. Comparing one ship to another is appropriate if they will serve the same function. However, if one is a carrier, and the other is a supply ship, the comparison is meaningless. Similarly, effectiveness is often not directly related to weight. Thus a smaller ship with more accurate or efficient weapons will be more useful in many circumstances than a larger ship with less accurate weapons. The difference is accentuated due to the potentially increased vulnerability of the larger ship.

In addition to large numbers of theater nuclear weapons, the US has over 9000 strategic warheads and bombs, of which approximately 25% are carried on ICBMs, 50% on SLBMs, and 25% on bombers. The Soviets have about 7000 strategic warheads, of which approximately 75% are carried on ICBMs, 20% on SLBMs, and 5% on bombers. Soviet missiles have greater throw weight (the capability to carry larger warheads with more explosive power), while US missiles are generally more accurate. The US has more bombers, which in turn have greater speed and range than Soviet bombers. US submarines are less noisy than Soviet submarines, and are consequently more difficult to detect. The US also has the advantage in anti-submarine warfare, but the Soviets have more air defenses with which to intercept a bomber attack.

QUESTIONS

What is the current status of the US and Soviet nuclear forces? How can the two forces be compared? Is there a "window of vulnerability?" Which country "leads" the nuclear arms race? Would more nuclear weapons change the relationship between the superpowers? What threats do the Soviets pose for the U.S. and our allies? What are U.S. perceptions of Soviet security goals? Soviet perceptions of U.S. security objectives? What threats does the U.S. pose for Soviet military planners? What are the purposes and capabilities of U.S. and Soviet defensive forces?

READINGS

George Kennan, "Reflections: Two Views of the Soviet Problem", The New Yorker, November 2, 1981.

American Friends Service Committee, "Questions and Answers on the Soviet Threat and National Security", 1981.

Colin Gray and Keith Payne, "Victory is Possible", Foreign Policy, #39, summer 1980.

Sources for information on annual expenditures and reports on force structure include World Military and Social Expenditures (Ruth Sivard), and The Military Balance (International Institute for Strategic Studies).

IV. STRATEGIC POLICY

The basis for strategic weapons decisions often lies in "doctrine", a term that refers to the structure of a nation's strategic plans. A key portion of the US nuclear doctrine concerns the ways in which the US attempts to deter nuclear war. US strategies to prevent nuclear war range from the formulation of plans to fight limited nuclear wars to plans for massive retaliation in the event of a Soviet attack of any magnitude.

In the past, one of the cornerstones of US strategic policy has been the conception of deterrence through the maintenance of a "triad" or mix of three different forces. The triad consists of bombers, land-based missiles, and submarine-launched ballistic missiles. For successful deterrence, each of the legs of the triad must be able to survive a Soviet nuclear attack, and in response do "unacceptable" damage to the Soviet Union. Unacceptable damage has been defined as the ability to destroy a substantial portion of Soviet industry and population. It has been calculated that a force equivalent to 400 one-megaton weapons could destroy 35% of the Soviet population and 70% of Soviet industry.

Some analysts have suggested that the triad is a costly and overly conservative strategy. They argue that the US would be just as safe, and our deterrent just as strong, if only two-thirds of the triad were capable of doing unacceptable damage in response to a Soviet attack. Others suggest that the US should adopt a policy of launching its ICBMs on warning of a Soviet attack, to avoid a "use them or lose them" situation. Opponents of this option stress the risks of accidental nuclear war, due to computer malfunction or miscalculation.

QUESTIONS

What are the meanings and potential consequences of the following deterrence strategies: containment; massive retaliation; flexible response and counterforce targetting; mutually assured destruction; limited nuclear war? Does the triad strengthen the US strategic position? What are the advantages and disadvantages of the Soviet concentration on land-based missiles? What are the primary arguments for and against a triad of strategic forces? To what extent do the stated policies of the U.S. and Soviet Union correspond to their capabilities? What is launch on warning? launch under attack? How could either be used to reduce Minuteman vulnerability? If the U.S. adopted an early launch strategy, what would be the likely Soviet response? If the Soviet Union adopted such a strategy, how would the U.S. respond?

READINGS

James Fallows, National Defense, (New York: Random House) 1981, chapter 6.

James R. Schlesinger, "The Evolution of American Policy Towards the Soviet Union", International Security, v.1 #1, summer 1976.

Bernard Brodie, "The Development of Nuclear Strategy", International Security, v.2 #4, spring 1978.

V. CLOSE CALLS AND MISTAKES

The US missile attack warning system is designed to provide the earliest possible warning of an attack on the US. The warning system has three parts: sensors, computer centers, and command posts. The sensors are designed to detect missile launch or bomber attack, and includes satellites and extensive radar networks. The computer centers process and analyze the sensor data, passing this information to the command posts. At the command posts, the data from the sensors and computers are analyzed and the necessity for action is assessed.

Unfortunately, this system is prone to error. For example, on several occasions, the computer portion of the system has indicated that the US was under attack, when in fact no such threat existed. Assuming that detection systems are never 100% reliable, one may err in two different directions. The first type of error is to make the system too sensitive. An overly sensitive system will almost never miss an actual attack. However, it may frequently give signals indicating attack where there is little evidence to support such a conclusion. The alternative is to make the system less sensitive, so that false alarms rarely occur. This choice leaves the possibility that there will be an attack that the sensors will be unable to detect. Currently, public attention is focused on the number of false alerts, and the possibility that an overly sensitive alert system may provoke a nuclear response to a non-existent attack.

In 1979 and 1980 there were four determinations of a possible threat to North America. In each case, the Commander-in-Chief of the North American Aerospace Defense Command (NORAD) decided that there was a potential threat to North America and called a threat assessment conference, the last step before direct Presidential involvement. One incident was caused by the misinterpretation of the nature of a rocket in a decaying orbit; another resulted from the assumption that simulated data (inadvertently introduced into the NORAD system) were reliable indicators of a massive attack. A third incident was a mistaken response to a Soviet SLBM training launch; the last was caused by a faulty chip in a communications processor computer.

QUESTIONS

What is the nature of the US alert system? What sorts of errors does it make most frequently? How are they caused? If these errors are eliminated, are different errors likely to result? Could a nuclear war start as a result of computer error? human error? What is the command, control, communications, and intelligence (C^3I) system? How is it supposed to function during nuclear war? What are potential problems with this system? What happens to decision-making processes when the "time of travel" (from one country to another) is reduced from 30 minutes to 6 minutes? What effect does the deployment of Soviet SS-20s and US Pershing IIs have on this decision-time?

"U.S. Nuclear Weapons Accidents: Danger in Our Midst", Defense Monitor, Center for Defense Information, vol. X #5.

"Recent False Alerts from the Nation's Missile Attack Warning System", Senate Armed Services Committee, (Washington, D.C.: GPO) 1980.

VI. NEW WEAPONS SYSTEMS AND DEVELOPMENTS

One of the most serious threats to peace is that technology and weapons development will outdistance or dominate arms control efforts. Arms control negotiations may take years to conduct, allowing research and development of new systems to proceed, often at an increased pace. In addition, if one country leads the development of a weapons system, it may be unwilling to forfeit this advantage to secure an arms control agreement.

The decision not to include multiple independently-targetable re-entry vehicles (MIRVs) in SALT I is an example of the difficulty of arms control. The MIRV decision was attributed to three primary factors. First, some scientists and military officials were anxious to determine the technological feasibility of MIRVing a missile. They did not want to ban its development before they tested the technology. The US was also concerned that the Soviet Union would develop ABM capabilities. This development could have endangered the US ICBM force. US officials thought that MIRVing US ICBMs would allow the US to retain the ability to launch a successful retaliatory strike against the Soviet Union. In addition, the US was ahead of the Soviet Union in the development of MIRV technology, and did not want to relinquish this advantage. At this time, arms control advocates felt they had to choose between fighting the proposed ABM, and opposing MIRV. They chose to fight the ABM, and allowed the development and deployment of MIRV'ed missiles. In retrospect, many of these same advocates feel they made the wrong choice.

At present, several new systems are under consideration or development. Some have been justified as bargaining chips for arms control negotiations with the Soviet Union; others are seen as responses to Soviet military and technological advances. In order to understand the current arms race, and the potential for future escalation, it is necessary to comprehend both the nature of these developments, and their potential impact on future negotiations.

QUESTIONS

In general, what are the arguments for and against the development of new weapons systems? What is the historical response to the deployment of new weapons? To what extent are new systems justified as bargaining chips? What are the characteristics of the following systems: the B-1 bomber, the MX missile, Trident II submarine, cruise missile, SS-18 and SS-19 ICBMs, and Typhoon-class submarines? What is the schedule for deployment of each of these systems? How may they threaten future arms control attempts? What are the potential capabilities of these systems?

READINGS

James Fallows, National Defense, chapter 3.

Frank Barnaby, "World Arsenals in 1981", The Bulletin of the Atomic Scientists, August/September 1981.

"Preparing for Nuclear War: President Reagan's Program", Defense Monitor, Center for Defense Information, vol. X #8.

VII. ECONOMIC TRADE-OFFS

If the government could spend at will, choices between military and social expenditures might not be a major issue. However, economic realities preclude this option. Accordingly, the discussion of trade-offs between military and social expenditures proceeds from the assumption that the governmental budget is restricted. However, it should be noted that funding for strategic nuclear weapons represents only about 10% of the annual defense budget. In fact, building nuclear weapons is often cheaper than deploying the equivalent destructive capability in conventional weapons. Thus, a decision to convert from nuclear to conventional weapons might actually increase defense costs.

Advocates of decreased military expenditures argue that every dollar spent on the military diverts a dollar from social expenditures. In addition, there are various analyses of the number of jobs foregone as a result of military expenditures. Money spent on goods and services creates more jobs than money spent on military hardware and weapons stockpiles. For example, durable goods may remain in use for a substantial period of time, and the wages paid to the producer of such goods may subsequently be used to purchase other goods and services. In contrast, money spent on military hardware is spent once, and then the weapons are stored; there is no further cycling of goods or services through the domestic economy. There is also concern that the military and the private sector compete for scarce resources. One phenomenon of this type is the domestic "brain drain". This term refers to the loss of trained technical specialists who move from the civilian to the military sector, often leaving a shortage of talent in that portion of the civilian sector.

QUESTIONS

What is the relationship between military and social expenditures? To what extent do social or civilian expenditures create more jobs than military expenditures? Why? Can "military dollars" be substituted one-for-one for "civilian dollars"? What kinds of effects do military expenditures have on the economy? What effect would a constitutional amendment requiring a balanced budget have on choices between military and social expenditures?

READINGS

John Kenneth Galbraith, "The economics of the arms race--and after", The Bulletin of the Atomic Scientists, June/July 1981.

Marion Anderson, "The Empty Pork Barrel", Employment Research Associates, 1982.

Michael Parenti, "More bucks from the bang", The Progressive, July 28, 1980.

VIII. SOLUTIONS, TREATIES, AND VERIFICATION ISSUES

During the last twenty years, there have been many attempts at arms control, including more than a dozen negotiated treaties and agreements. Many proposals have focused on a particular weapon or system, such as the ABM. Other attempts have included quantitative limits on the number of nuclear missiles, launchers, or warheads that a country may deploy. Key agreements and provisions include:

1963 PARTIAL TEST BAN TREATY (PTBT), which prohibited the testing of nuclear weapons in the atmosphere, in outer space, and under water.

1972 SALT I INTERIM AGREEMENT, which provided for a five year freeze on the total number of ICBM and SLBM launchers for the US and the Soviet Union.

* In September 1977, both countries announced their intent to continue honoring the SALT I agreement, even though it technically expired that fall.

ABM TREATY, a part of SALT I, which limited the deployment of ABM systems by the US and the USSR to two sites. Each country was allowed one site to protect the national capitol, and one to protect an ICBM complex.

* A 1974 protocol to this treaty further limited each party to a single site.

1974 THRESHOLD TEST BAN TREATY (TTBT), which prohibited underground tests of more than 150 kilotons.

* This treaty has not yet been ratified by the United States.

1979 SALT II, which set a ceiling of 2400 on ICBM and SLBM launchers, heavy bombers, and air-to-surface ballistic missiles (ASBMs) capable of a range of more than 600 kilometers. The treaty required a reduction of this ceiling to 2250 by the end of 1981, with decreasing inventories beginning January 1, 1981. It also contained sub-limits on MIRVed missiles, and restrictions on the number of re-entry vehicles allowed on current launchers. A protocol to the treaty contained short-term prohibitions on the deployment of mobile ICBM launchers and the flight-testing of ICBMs from such launchers.

* This treaty has not yet been ratified by the United States.

In addition, several proposals are now under consideration. Key proposals and provisions include:

COMPREHENSIVE TEST BAN TREATY (CTBT)

This treaty would prohibit all nuclear weapons testing, including underground tests of any size. Negotiations on the CTBT were suspended in 1980.

NUCLEAR FREEZE

This proposal exists in various forms. The most common interpretation of the freeze is a "mutual and verifiable freeze on the testing, production, and deployment of nuclear warheads, missiles, and other delivery systems". Others suggest a freeze in deployment, but not testing or production; still others suggest a freeze only after the US has implemented a weapons buildup that will achieve what they consider to be parity with the USSR.

STRATEGIC ARMS REDUCTION TALKS (START)

This proposal, suggested by President Reagan, includes a "Phase I" limitation of 5000 on the total number of warheads deployed by each country. Within this limit, there would be a sub-limit of 2500 on land-based missiles. In Phase II, the parties are to concentrate on an agreement to equalize throw weight, but only on ballistic missiles, where the Soviet Union's forces are concentrated. Bomber throw weight, in which the US leads the Soviet Union, is not to be limited under this agreement.

NO FIRST USE

This proposal includes a declaration by the US that we will not be the first to use nuclear weapons. Such a declaration might be accompanied by a significant change in the US force structure, deemphasizing the use of nuclear weapons. It might also include the removal of 6000-7000 battlefield nuclear weapons from Europe.

In addition, it has been suggested that the US could simply ratify SALT II to begin the next phase of arms control.

VERIFICATION

Many of these proposals raise issues about the verification of arms control agreements. Unless the provisions of treaties and agreements are perceived as verifiable, the chances of domestic acceptance are severely diminished. SALT I and II depend on the national technical means available to each country for verification, and rely on standing consultative commissions to implement the agreements. However, there is concern that national technical means are insufficient, and that the Soviets may be violating these and other arms control agreements. This issue was important in the consideration of the SALT II treaty.

Others argue that this concern is vastly overstated. They claim that it is virtually impossible for either country to make substantive changes in the balance of forces without the other side discovering the attempt. In addition, these analysts emphasize the costs if a country detects treaty violations. For example, it was assumed the US would vastly accelerate its research and development program if it was proven that the Soviets had violated the SALT II treaty.

Both countries are concerned with the question of on-site inspections. The Soviet Union agreed to on-site inspections as part of the Comprehensive Test Ban Treaty negotiations, but the negotiations were never completed. Some analysts claim that the Soviet Union would violate arms control agreements if on-site inspections were not required; others say that the Soviets are concerned that the US would use on-site inspections to conduct espionage activities within the Soviet Union.

QUESTIONS

What attempts have been made at negotiated arms control? What treaties are now in effect? Which ones have expired but are still being observed; have been negotiated but not ratified; are in the process of negotiation; have been proposed by others, but not pursued by the administration? How does SALT differ from START? What are the differences in the various freeze proposals, and between the freeze and no-first-use? What effect would these proposals have on the balance of forces and the theoretical vulnerability of land-based ICBM forces? How comprehensive are these proposals? What are the potential obstacles to ratification or acceptance of these proposals? For each of these proposals, what issues would require verification of compliance? What is the likelihood that cheating could be detected?

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Philip J. Farley, Betty G. Lall, Gerard C. Smith, Herbert Scoville, Jr., and Michael Krepon, "Nuclear Arms Control: Options for the 1980s", The Arms Control Association, 1982.

Daniel Ford, Henry Kendall, and Steve Nadis, Beyond the Freeze: The Road to Nuclear Sanity, Union of Concerned Scientists (Boston: Beacon Press) 1982.

Raymond Garthoff, "Mutual Deterrence and Strategic Arms Limitation in Soviet Policy, International Security, v.3 #1, summer 1978.

"Verification", Wall Street Journal, May 20, 1982.

Robert J. Einhorn, "Treaty Compliance", Foreign Policy, #45, winter 1981-1982.

Noel Gayler, "How to Break the Momentum of the Nuclear Arms Race", New York Times Magazine, April 25, 1982.

APPENDIX B
ORGANIZING MATERIALS

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SAMPLE LETTER TO FACULTY MEMBERS

Elementary Schools:

Dear Faculty,

I am (We are) concerned about the effect that the threat of nuclear war may be having on children's development and the feelings of fear and helplessness it creates. Recent studies show that it is disturbing children more than we realize. I (we) would like to help them overcome these feelings and help them realize that we can create a safe and peaceful future together.

I would like to meet with anyone interested in discussing how we can best explore nuclear issues in the classroom. I have received some materials from Educators for Social Responsibility that I can share with you at this meeting.

The meeting will be in _____ at _____.

Secondary Schools:

Dear Faculty,

I am (We are) concerned about the effect that the threat of nuclear war and the arms race are having on our students' development, and the feelings of fear and helplessness that they create. I am also concerned that there is a major national debate around nuclear weapons of which our students have little understanding because of the complexity of the issue. We, as educators, can help our students overcome at least those aspects of fear that come from ignorance and that leave them feeling so powerless.

The critical nature of this issue and its relevance to students' lives gives us the opportunity to help them become more informed and active citizens. The technical, political and educational issues raised by a discussion of nuclear weapons and defense policy are complex and need to involve all of us in finding the best means of educating ourselves and our students.

I have received some materials from Educators for Social Responsibility that may be helpful to us. Please come to a meeting on _____ in room _____ at _____ to discuss what we can or should teach about this issue.

SAMPLE PUBLICITY FLYER

SIX REASONS WHY YOU SHOULD COME TO A MEETING TO DISCUSS WHAT WE CAN DO ABOUT OUR CHILDREN'S FEAR OF NUCLEAR WEAPONS

1. There is a real possibility that nuclear war might be triggered by mischance or miscalculation. We can no longer deny the danger.

2. Educators have a special concern for the preservation of civilization -- that's our business. Experts agree that war between the U.S. and the U.S.S.R. would likely result in nuclear holocaust. Civilization as we know it would be destroyed.

3. The threat of nuclear war worries a growing number of your students. As educators we need to inform ourselves in order to help them.

4. The feeling of powerlessness is distressing. But we add to our own feeling of powerlessness by failing to act. There ARE things that we can do. We CAN be the masters of our fate. Democracy CAN work!

5. There is a direct connection between escalating military spending and the draining of funds away from education. Tight school budgets, with teacher layoffs and larger classes, are the eventual result of the economic burden of the arms race.

6. Reliance on nuclear weapons for protection means that we must really be ready to use them. To use them could well mean suicide for the human race. So how can we rely on them? Don't we have to find some other method of protection?

"People in the long run are going to do more to promote peace than are governments. Indeed, I think that people want peace so much that one of these days governments are going to have to get out of their way and let them have it."
-- Dwight D. Eisenhower

"As you can plainly see, he leaves me no option but to get a bigger and better gun."

SAMPLE LETTER TO SUPERINTENDENTS AND SCHOOL BOARDS

The following is an example of a letter that you might revise to fit your needs. If several teachers and parents sign this type of letter, this would give it added importance.

Dear _____,

We believe that the nuclear arms race and the danger of nuclear war are the most critical issues of our time. Recent research by Drs. John Mack and William Beardslee of the American Psychiatric Association suggests that the fear of nuclear war may be profoundly affecting children's development. As educators and parents, we feel the school is an ideal forum for dealing with the nuclear issue. In the past the discussion of nuclear issues has been limited and informal. We believe that it is important that our schools address this issue and help students become active participants in the democratic process.

We see no easy answers, no "nuclear education curricula", that we can simply pull from a shelf and teach tomorrow. We need to be realistic about the dangers, yet offer hope for the future. We need to nurture dialogue, debate, and critical thinking while encouraging students to stand up for what they think is right. We need to determine what is educationally appropriate for different grade levels.

The technical and political questions raised by a discussion of national security, defense policy, and the arms race are also complex. There are no simple solutions to either the problem of nuclear weapons or the question of what to teach students.

We do believe that it is important for students to hear different sides of the issues.

One way to begin is to create a dialogue among educators, students, and parents on how best to educate ourselves and our children. This might include:

1. Finding out what students know and feel about nuclear weapons and the threat of nuclear war, so that we can appropriately meet their needs for support and information.

2. Providing a forum for students, faculty, and parents to consider the importance of this as an educational issue.

3. Creating strategies for raising nuclear issues and integrating materials into classrooms.

We would like to meet with you to discuss your thoughts and feelings about the educational relevance of this issue and to receive your advice on how we can best proceed.

Sincerely,

SAMPLE LETTER TO PARENTS

Dear Parent,

On (date), the _____ School is participating in a Day of Dialogue on the nuclear arms race entitled "Creating Our Future". The goal of the day is to begin exploring children's and adolescents' concerns about nuclear war, and to begin thinking about how we as a school community can best address these concerns. We would like your help in bringing educators, students, and parents together to accomplish this by coming to a meeting on _____ at _____ in _____.

We have undertaken this project because of a growing awareness among educators of children's fears and concerns about nuclear war. The American Psychiatric Association Task Force report, "The Impact on Children and Adolescents of Nuclear Developments," by Drs. John Mack and William Beardslee, suggests that the fear of nuclear war may be profoundly affecting children's development. There are no easy answers, no "nuclear education curricula" that can simply be pulled from a shelf and taught tomorrow. In order to discuss these issues in the classroom, a teacher must be informed about the possible consequences of the use of nuclear weapons, yet be able to offer hope for the future. Educators must nurture dialogue, debate, and critical thinking, while encouraging individuals to stand up for what they think is right. In addition, there must be careful consideration of what is age-appropriate in curricula dealing with nuclear issues. We believe that it is important to present different sides of the issues and to use materials that stress critical thinking and citizen involvement in decision-making.

On _____, we plan to talk about what children are thinking, what might be taught, and how to develop effective classroom strategies. The nuclear arms race and the danger of nuclear war are critical issues of our time. The _____ School must appropriately meet our students' needs for support and information on nuclear issues and help them become active participants in democratic decision-making. Through education, adults can respond positively to our own and our children's concerns. We hope you will attend our initial meeting. We look forward to working together.

Sincerely,

STUDENT LETTER

Dear Student,

When Dr. Helen Caldicott spoke at my high school last year on the dangers of nuclear war, I went home and paced the kitchen floor trying to figure out what I could do, instantly, to help bring about a change. Of course, change doesn't come about instantly, and all I could do that afternoon was to call several local anti-nuclear organizations to discover whether they knew of any high school groups. But that was a start.

Although my ideas at that point were vague, I started to talk to other students who had the same reaction to Dr. Caldicott's presentation. From our discussions grew weekly meetings, a day-long, all-school teach-in, and a growing and active disarmament group at my high school.

I think we surprised ourselves with what we were able to accomplish; after all, we were just a bunch of kids -- how could we tell teachers what was important for them to teach? But once we got used to taking the initiative, we found that the teachers and administration of our high school were generally receptive to our plans. In fact, being a student group in some ways gave us more influence. Teachers were impressed that we felt strongly enough about disarmament to try to inform and involve others; even those who disagreed with us congratulated us on the success of the teach-in. Other students were less likely to view the issue as "another one of those boring things the teacher thinks we should know."

On October 25, 1982, 500 schools around the country took part in a national Day of Dialogue about the nuclear arms race. If you are concerned about the issue, don't hesitate to involve yourself in planning activities for your own Day of Dialogue! Your teacher has received a packet of information and suggestions; you can use this as a first resource. You will need to find out what the teachers in your school are planning, but you don't need to limit yourself to their ideas; they will probably be glad to have your help or to see you do something on your own.

If you want to get in touch with other high school students, contact the Student/Teacher Organization to Prevent Nuclear War (STOP Nuclear War). They have chapters all over the country and are a useful resource for support and suggestions whether you want to start a chapter, lead a discussion, or just find our more about what high school students can do. They can be reached at:

STOP Nuclear War
Box 232
Northfield MA 01360
(413) 498-5311 ext. 264

The dangers of nuclear war are so immense that they often seem overwhelming, but even the smallest efforts to eliminate them can be the beginning of a larger influence. I am convinced we can all make a difference.

Debora Tessman
STOP Nuclear War

A SUPERINTENDENT GIVES HIS REASONS FOR TEACHING ABOUT NUCLEAR ISSUES

by Dr. Robert Sperber

Former Superintendent of the Brookline Public Schools

If we want to be seen and appreciated as vital social institutions which need preserving and support, then we as teachers must play a key role in the lives of children and their families. Teaching about the issues of nuclear disarmament, helping our students develop their own framework for decision-making in the nuclear age, will not only help our students, but will enhance the schools as an important social institution.

Related to the issue of preserving the school as a significant institution is the question of helping ourselves as teachers to feel empowered at a time when society is clearly signaling that it doesn't place too high a value on teaching. Nothing can help us more in this regard than to deal effectively with an issue which affects the survival of our civilization. Teaching about the nuclear age will give us a deep sense of helping to preserve the human race.

From a personal point of view, engaging in this valuable effort, in this crusade to preserve our planet, will help us as individuals to deal with our sense of denial or our sense of anger which we feel when we read the newspapers or listen to television or radio and consider the priorities of our government.

The nation's publishers devote little attention to this subject. They are afraid that if they include material that is controversial, or which offends a group of individuals, they will not get their books accepted.

My own sense as an educator tells me that if a subject is avoided, if it is too controversial, that is all the more reason why it should be included in the experiences of learners. As educators we have a responsibility to deal with controversy, for it is out of conflict and disequilibrium that real learning takes place. We cannot allow others to take away our right to think critically about vital materials.

Educators have a responsibility to serve as adult role models for their students. As educators we have a responsibility to teach our students content about nuclear issues to help them make intelligent choices, to help them think about a critical issue and to give them a useful outlet for their thoughts and their feelings.

SAMPLE RESOLUTION TO A CITY COUNCIL, SCHOOL BOARD OR TEACHERS ASSOCIATION

RESOLUTION TO SUPPORT A DAY OF DIALOGUE ON THE NUCLEAR ARMS RACE

WHEREAS: Nuclear war constitutes great danger to our city, our country, and the future of humanity;

WHEREAS: Recent research suggests that the fear of nuclear war may be profoundly affecting children's development;

WHEREAS: (optional) Increased military spending is resulting in a decrease in federal monies available to states and localities for quality education;

WHEREAS: It is the responsibility of our schools to help educate children about nuclear issues and issues of conflict and conflict resolution so that they may overcome those fears which come from lack of understanding, and play active roles in creating a future that will be both safe and peaceful; and

WHEREAS: There are no simple solutions to either the problem of nuclear weapons or the questions of what to teach children,

RESOLVED: That the _____ council/committee/local designate _____ as a day for beginning a dialogue among educators, parents, students and community members on how best to educate ourselves and students on issues related to nuclear war and peace. The Day of Dialogue shall be entitled "Creating Our Future".

RESOLVED: That the day will include creating plans for raising nuclear issues in our schools and introducing appropriate materials into classrooms, said plans to be initiated by the Superintendent.

A6 BOSTON SUNDAY GLOBE JUNE 13, 1982

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LETTERS TO THE EDITOR

Talking about peace

The May 23d editorial, "Growing up nuclear" is a helpful contribution toward understanding children's anxieties about nuclear war. However, while "sharing feelings" or going to rallies with their parents may help some children, for many this is not enough.

Students need time in their schools not just to talk about fears, but also to share hopes and ideals for the future, and to reflect on what kind of world they want to help create.

Older children should have access to information and differing opinions on nuclear weapons and disarmament proposals. They should be able to ask questions and study positive examples of community and national leadership for change with teachers who stimulate critical thinking.

Educators for Social Responsibility, a national organization of teachers, administrators, and parents, is sponsoring a teach-in – "Creating our future: A day of discussion on the nuclear arms race" – at schools around the country next fall to give children and adults a chance to learn more and to consider together how to take action for a nuclear weapons-free world.

TONY WAGNER
SHELLEY BERMAN
Educators for Social Responsibility
Brookline

SAMPLE PRESS RELEASE

Press Contact: name, address and phone number

FOR IMMEDIATE RELEASE: date

EDUCATORS, STUDENTS, AND PARENTS TO JOIN IN A DAY OF DIALOGUE ON THE ARMS RACE ON _____

On _____, at the _____ School, educators, students and parents will join in a Day of Dialogue entitled "Creating our Future" to discuss the nuclear arms issue and its appropriate treatment in the schools.

(Specific description of the event, e.g.: The day will be devoted to classroom discussions of children's and adolescent's questions, thoughts, fears and concerns about the threat of nuclear war. These discussions will be followed by an evening meeting of interested educators, parents and students who want to reflect on the ways schools can help students learn about the issues related to nuclear weapons.) (Quote from a local coordinator, administrator, school board member, or student.)

Recent research indicates that children, even young children, are concerned about the threat of nuclear war. This research suggests that the fear of nuclear war may be profoundly affecting children's development. Dr. John Mack, one of the authors of the American Psychiatric Association's Task Force report, "The Impact on Children and Adolescents of Nuclear Developments," states,

> "We may find we are raising generations of young people without a basis for making long-term commitments, who are given over, of necessity, to doctrines of impulsiveness and immediacy in their personal relationships or choice of behaviors and activity."

He concludes that "At the very least, we need to educate our children to the realities of nuclear...weaponry so that they can be helped to overcome at least that aspect of fear which derives from ignorance and which leaves them feeling so powerless."*

The day is being supported nationally by Educators for Social Responsibility, a non-profit organization of educators and parents with 70 chapters nationwide and main offices in Cambridge, Massachusetts. Shelley Berman, National Coordinator for the Day of Dialogue, observes, "Educationally there are no easy answers, no 'nuclear education curricula' that can simply be pulled from a shelf and taught tomorrow. The technical and political questions raised by the discussion of national security, defense policy, and the arms race are also complex. To help schools begin to address the nuclear issue we must create a dialogue among educators, students, and parents on how best to educate ourselves and our students. This Day of Dialogue will be part of a national effort to help educators and students understand this issue and find ways to act to prevent nuclear war."

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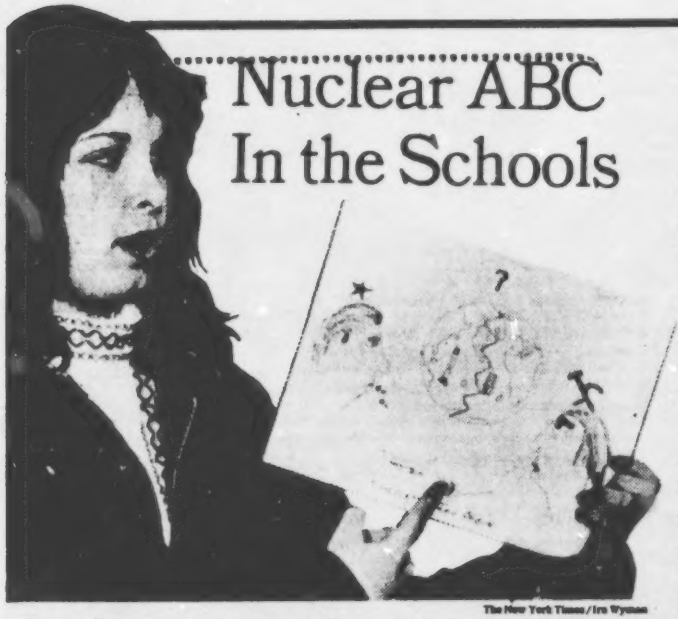
* John Mack, "Psychosocial Effects of the Nuclear Arms Race", Bulletin of the Atomic Scientists, April, 1981, p. 20.

Nuclear ABC In the Schools



The New York Times / Ira Wyman

Kaaren Nelson with a drawing she created for a class in "Decision-Making in a Nuclear Age" at the Educational Cooperative School in Needham, Mass.

By RHODA M. GILINSKY

BOSTON

SIXTEEN high school seniors sit in a circle in Dr. Robert McCarthy's class at Brookline High School, listening intently and responding readily to questions that would pose a challenge to most scholars and politicians.

Why was the development of nuclear weapons such a profound change?

What are the implications for the traditional ways that conflicts have been resolved in society in the nuclear age?

What does this statement of Albert Einstein mean to you: "The unleashed power of the atom has changed everything except our way of thinking"?

The questions are raised in the course, called "Decision Making in a Nuclear Age," a new curriculum aimed at educating students about the facts relating to nuclear war. The program is being given on a pilot basis in seven classes in Brookline, Cambridge and Needham, Mass. In addition, segments of the material are in preparation or in use in 36 schools from Santa Cruz, Calif., to Matawan, N.J.

According to Roberta Snow, who devised the nuclear program along with Elizabeth Lewis, a teacher and curriculum developer, it is an outgrowth of a course developed five years ago on the Nazi mass murders.

Both courses are part of "Facing History and Ourselves," a curriculum and teacher-training project whose purpose is to bring students and teachers information about events in history not usually found in texts or offered in classrooms. Mrs. Snow is the nuclear program director.

"Throughout the Holocaust unit," she said, referring to the course on the Nazi massacres, "we found kids kept making reference to nuclear war and teachers kept asking if we had any material about nuclear weapons or nuclear power. At first we weren't clear about what they wanted, but we began to think about the idea and started some preliminary research."

Subsequently Mrs. Snow started a letter-writing project, with private financing, in which students from Massachusetts wrote to Soviet leaders urging them to look at Americans as real people. Excerpts from the letters have been translated into Russian and placed in albums for delivery to the Soviet Embassy in Washington. One album has already been accepted for delivery to the Soviet leaders. The organizers of the project are trying to develop a similar program in the Soviet Union, where students will write to our decision makers.

"Once the teachers on that project started talking about the Soviet Union," she said, "we realized we needed to give them and the students more materials to learn about the nuclear world." She noted that although the curriculum was developed several years ago, the current debates and attention to nuclear issues underscored its relevance and importance.

Asked about possible bias in the curriculum, Mrs. Snow replied that to the extent that teaching is a process of selection it is a political activity. "You teach the Civil War as a statement," she said. "Why didn't everybody fuss about how we teach the Civil War? The way I feel about this, is that you have to make sure that you give room to teach people how to think. We're teaching them how to think carefully and from a variety of positions."

The 300-page curriculum that Mrs. Snow and Miss Lewis developed includes courses on technology and on the physics and physical effects of a nuclear explosion. Issues involving ethics and social studies are interwoven throughout the course. These include the role of propaganda, the dehumanization of the enemy, decision-making about technology and ethical decisions confronting scientists.

"In Cambridge," Mrs. Snow said, "the teacher who was piloting the course was afraid to say 'nuclear weapons' in the course title on the advice of other teachers who said, 'Don't confront them with that.' She called it 'contemporary issues' and named 'nuclear' as one of them. Six people signed up for the course. She came here very upset and I told her to go back and call it 'decision-making in a nuclear age — confronting nuclear weapons' — and see if anyone signs up." They put the new course title in, named the chapters and what was going to be covered in the course. Twenty-six students signed up.

Recently, Mrs. Snow has been working with John Mack, a psychiatry professor at Harvard Medical School, on a questionnaire sent to students that tries to establish the impact of nuclear advances on their lives. Results indicate that 90 percent of the students don't believe there is a future.

"I'm very pessimistic about the world," said Elizabeth Perry, a senior in the nuclear-age course. "I feel it's real possible we will have a war and most of the human race will be exterminated."

Dr. McCarthy, who is also the principal of Brookline High School, suggested that teaching the course was not easy. "Teaching about nuclear issues places a lot of responsibility on the teacher," he said. "We are all learning about many of these issues along with the students. Most of us are just beginning to examine them, and they are complex. No one really has the answers."

Students must test different viewpoints. In one phase, they write an article for a newspaper from the perspective of either American citizens urging a United States nuclear buildup or of Soviet citizens supporting a Soviet buildup. At a final symposium the students select a way of solving the nuclear problem that they must defend at a meeting to which parents are invited.

Intellectualizing the issue of nuclear war seems to help some young people deal with its horrors. "I used to be terrified," said 15-year-old Jennifer Donato, who was in the first pilot class. "Now I break it down logically. I see it as a challenge to overcome this threat to our world."

Because the overall emphasis of the program is on the importance of social action, the final segment of the nuclear course, called "Taking a Stand," includes a discussion of actions that teen-agers have taken that have made a difference in society.

For students, one of the major benefits of the course is that it allows them to face the problems that confront adults. Elizabeth Perry said that even students who were usually indifferent contributed to class discussions in the course.

"Not enough information about nuclear has been fed to us in the past," Miss Perry said. "That's what's good about this. It gives us a chance to get a lot of different ideas about nuclear and it's pertinent. I'm old enough to accept it." ■

Facing the nuclear age: What to teach

By C. Whitney Ward
Special to The Globe

"Children are aware of and deeply concerned about nuclear weapons and nuclear power," say Boston psychiatrists Drs. John Mack and William Beardslee, who presented a questionnaire to 75 Boston area 10th, 11th, and 12th grade students as part of a recently published study.

The following three responses to the question, "What does the word 'nuclear' bring to mind?," are a case in point:

"Fission, fusion, power (constructive and destructive), meltdown, Hiroshima, Nagasaki, leak, explosion, radiation, cancer."

"Bombs, the world as nothing, completely wiped out, danger, sadness, corruption, explosion, children, waste, pollution."

"Stars... planets... space... darkness..."

The study – The Impact on Children and Adolescents of Nuclear Developments – was an attempt by the American Psychiatric Association Task Force, of which Mack and Beardslee are associates, to detail children's attitudes towards nuclear weapons and nuclear war.

According to the authors, very little literature exists on the developmental effects of the threat of war on children psychologically and socially. Most post-World War II studies have focused on adult survivors of Hiroshima and Nagasaki. But, even those deal more with the medical and psychological effects than with the psychosocial effects.

Findings from the Beardslee-Mack questionnaire survey strongly suggest that although children recognize possible benefits from nuclear power and nuclear weapons, they are also deeply disturbed by the specter of nuclear war and the risks associated with nuclear power. A general uneasiness about their future and about whether a nuclear war can be survived often gives children an overwhelming sense of powerlessness.

"At the very least," conclude the authors, "we need to educate our children to the realities of nuclear energy and weaponry. Such knowledge could give young people a beginning sense of control over the experience they have of growing up in the nuclear age."

Associated Press photo of blast from 1946 Navy test in San Diego Bay.

'Knowing is terrifying,
not knowing is terrifying,
but not knowing is hopeless,
and knowing may save us.'
– Brookline ninth grader

Are Beardslee and Mack alarmists? "No!" comes the collected shout of thousands of educators, physicians, students and parents across the country who are already committed to seeing nuclear education taught in our schools.

The real push in the movement has come from national groups with growing concern reflected in local school systems like Brookline, Boston, Cambridge and Newton.

Educators for Social Responsibility (ESR), a national organization based in Boston, works in the forefront of nuclear education.

"What is striking," says ESR National Executive Director Tony Wagoner, "is that ESR is a movement that transcends all of the traditional boundaries between public and private schools, between union and non-union. Every type of school is represented. People are really coming together and trying to formulate strategies of how to deal with this very, very, complex issue."

The ESR Curriculum Research Project has already completed an annotated bibliography of educational materials for adults and children about issues of war and peace. ESR is now developing a source book for teachers and parents that will incorporate what has been learned from their classroom research. The organization is attempting to become a clearinghouse for curriculum materials being developed around the country.

"A great deal of literature leads to the conclusion that children are terrified about nuclear issues, but don't have the kinds of defense mechanisms adults have," says Wagner. "We feel that it's important for adults to begin to recognize and respond to children's fears about nuclear war."

In that connection, ESR plans a National Day of Dialogue – a nuclear education teach-in to be held on Oct. 25 at elementary, secondary and higher educational institutions throughout the country. Resource/study guide packets for K-3, 4-6, 7, 8 and high school are being prepared this summer and will be available

NUCLEAR, Page B49

Making decisions in the nuclear age

■ **NUCLEAR**

Continued from Page B47

to educators and parents for teach-in activities.

Other national organizations are showing equal concern about nuclear education.

● The National Education Association is setting up a peace education committee in its Washington office, and the Union of Concerned Scientists is considering a collaborative project with the NEA.

● The National Association of Independent Schools has formed an ad hoc committee to look into nuclear curriculum material and to study what is being done in independent schools around the country with regard to nuclear education.

● The Federation of American Scientists is producing a newsletter - COUNTDOWN - about nuclear education curriculum at the college level.

Locally, Brookline has taken the lead in developing a nuclear education curriculum at the high school level. "Decision Making in the Nuclear Age" was piloted at Brookline High School and three other area schools last year: Pilot School, Cambridge; Tech School, Needham; and the Cambrid_ School, Weston.

This 12-week curriculum was an outgrowth of the Facing History and Ourselves project on 20th century genocide, which was developed and piloted by Brookline teachers under a title 4C grant. The original F.H.O. project, The Holocaust and Human Behavior Curriculum, has become a national model program and is being used in over 60 schools throughout the United States and Canada.

"The nuclear project began initially because we as adults were concerned," says Elizabeth Lewis, a social studies teacher at Brookline High School and a staff member of Facing History and Ourselves. "But once we started listening to what the kids were saying, we began to understand that it wasn't just our concern, but the kids' concern as well."

"Decision Making in the Nuclear Age," is an inquiry approach developmentally geared for adolescence. It focuses on nuclear technologies, the effects of nuclear explosions, ethics and responsibilities of nuclear power, the Hiroshima and Nagasaki experience, disarmament and decision-making skills. And these are presented in a context of readings, journal keeping, guest speakers, interactional exercises and discussion.

"Although the focus is on nuclear weapons, it's definitely not an anti-nuclear war course," says Lewis. "Yes, we do posit that nuclear weapons and nuclear war are dangerous, and decisions about them should be made with care, but within that bias, we offer the kids many different perspectives and opinions.

"We think it is important that kids learn to be open to other perspectives. The difference between knowledge and certainty is a very important issue brought up again and again in the course. We teach kids that they should never be so certain they are right that they stop listening to others' opinions."

Over 200 copies of "Decision Making in the Nuclear Age" were sent to schools throughout the United States, and project staff members are now in the process of collecting and analyzing data based on its use. This summer the curriculum will go through a complete revision.

"Without getting all of the evaluations back," says Lewis, "we can't say yet what worked and what didn't work. But, as far as I'm concerned, something worked in my class. Because at the end of the year, not only did all of the books come back, but not one was defaced. I think that says it all."

Under mandates from their school committees, Boston and Cambridge are following Brookline's lead in developing nuclear education curricula.

Boston's "Crossroads" curriculum was developed by an educational task force that is an outgrowth of The Jobs With Peace group, formed in 1980 to deal with issues of nuclear disarmament and defense spending. The "Crossroads" curriculum is designed for a week-long course and has a strong anti-defense bias. "It is crucial for people to make a connection between defense spending and the closing down of South Boston High," says Kathy Greeley of the Jobs With Peace Education Task Force. "No, we're not totally objective. We try to get kids thinking about how decisions are made about defense spending and the economy."

The curriculum is specifically geared for the urban, inner city student at junior and senior high school levels. Separate curricula were designed for use in English, science and social studies classes, but the overall focus is on:

● The effects of the nuclear bomb on the human body and the environment.

● What it would be like to be a survivor of a nuclear war.

● The issues behind the arms race.

● The effects of increased military budget and of social cutbacks on the quality of our lives.

● Students' feelings about living in a nuclear world.

● What students can do to respond to these issues.

"The goals of the curriculum are threefold," says Greeley: "To bring home the effects of nuclear warfare; to make a connection between social service cutbacks and military budgets; and to encourage students to become politically involved in whatever they think should happen."

The curriculum will be expanded to a three-week course this fall, and teacher workshops will be offered at the high school to facilitate its use.

Also in the city, the Boston Archdiocese Peace and Justice Commission has developed a peace education study guide that will be integrated into the curriculum of the 55 archdiocesan high schools this fall.

In Cambridge, the school committee passed a resolution mandating nuclear education for grades K-12. Carol Chaet, Social Studies Curriculum Coordinator, is now in the process of fulfilling that mandate for both the elementary and secondary school levels.

A nuclear curriculum will be developed for elementary students by the Cambridge Peace and Education Project, a group that has been working closely with the Cambridge public schools in the past year on a series of discussion groups with teachers.

On the secondary level, Brookline's "Decision Making in the Nuclear Age" was piloted last year at an alternative high school in Cambridge, and will again be offered as an elective at that school this fall.

Although designed as a semester long course, "Decision Making" can be broken into individual units, and Cambridge has elected to offer these 2, 4 or 6 week mini-courses as part of all US history classes at Ridge Tech and Latin High School this fall.

Newton's approach to nuclear education was generated by kids themselves.

"When Dr. Helen Caldicott spoke at Newton North High School last fall, it triggered a very special series of events," recalls John Klavens, a senior this fall at Newton North, who has been instrumental in educating the high school community about the nature of nuclear war.

"Just seeing the faces of those who saw Dr. Caldicott's presentation convinced me that this was something to rally around."

Klavens and a group of fellow students formed STOP - Student Teacher Organization to Prevent Nuclear War - and this spring launched a teach-in April 14.

With the help of social scientist Dr. David Rothberg, Klavens designed a questionnaire that was presented to every student at Newton North. The results were compiled and are being used as a basis for developing a curriculum Klavens hopes will be activated sometime this fall.

As a 9th grade Brookline student put it:

"Knowing is terrifying, not knowing is terrifying, but not knowing is hopeless, and knowing may save us."

Educators oppose nuclear arms buildup

Nuclear war is not survivable.

Yet, our nation continues to build up its stockpile of nuclear weapons and devote millions of dollars to their manufacture and storage.

Massachusetts is a center of activity among educators who do not like the thought of perishing in a nuclear war – and want to awaken their students to the dangers of the nuclear arms buildup.

MTA Today editor Russ Burbank examines efforts that are being made in Massachusetts to deal with nuclear issues in the classroom.

ESR: Stressing the value of critical thinking

Eighteen months ago, a dozen educators were sitting around a room, talking about what they could do to awaken the nation to the dangers of nuclear warfare.

The result of this discussion was the formation of Educators for Social Responsibility (ESR), a group dedicated to helping teachers and parents respond to children's fear of nuclear war through education.

ESR today claims nearly 2,000 members across the nation.

It is developing age-appropriate curriculum materials that present students with different sides of the issues, and stress the values of critical thinking and involved citizenship.

Says Shelley Berman, former teacher in Brookline and now program director of ESR: "We encourage exploration of what goes into decision-making and peacemaking. We attempt to show teachers how to teach these skills."

ESR concentrates on grades k-12. Other organizations such as the Union of Concerned Scientists work mainly with college students.

Says Berman: "We serve as a conduit of information to teachers, and a consultant in organizing. We are funded by memberships, and a couple of major donations. We have submitted several proposals to foundations for funding. The next three months will be crucial to us.

"We hope to become a large organization, because the work we are doing is important.

"The dedication of our volunteers is our biggest asset. Sixty-eight people worked for most of the summer to write and edit our Day of Dialogue planning manual. It is a looseleaf of 220 pages – cut from 400.

"We have 70 to 80 people at our monthly meetings, and we have 400 members here in the Boston area. Our chapters in Wisconsin, New York, San Francisco, Seattle, Chicago, all have 100 to 200 members. We have a chapter in Grand Forks, North Dakota.

"Our staff consists of four members, all paid from month to month.

"We find that teachers are extremely supportive of our work, and are excited about the fact that they can make a difference."

Berman has two suggestions for teachers interested in developing awareness of students about the nuclear weapons issue:

–"Listen to what the children know and feel about the issue. Listen to their concerns."

–"Meet with other teachers and develop a strategy on how to proceed."

He adds: "You have to develop peacemaking skills, critical thinking, negotiating, listening to each other. All these parts must come together, so the student will be able to understand what mature decision-making is all about.

"We are all responsible for creating the future. We must help our students take responsibility for envisioning a future, and taking steps to create it. . . . We must have a vision, and try to achieve it."

Activities that ESR has conducted since its inception in May, 1981 include establishing a curriculum committee to consider strategies for teaching issues related to nuclear weapons and disarmament to children of different ages, and develop new ideas and materials for peace education. The committee compiled an annotated bibliography and organized a day-long conference for educators at Lesley College last February.

Another ESR group has published a newsletter regularly and reviewed much of the published material about the nuclear arms race and related issues, with the intent of developing a self-education packet for educators. ESR's *Primer on the Arms Race* was printed early this year.

During the monthly membership meetings there has been a variety of discussions and activities. Small groups reviewed films about nuclear weapons and war, and discussed their application to classrooms.

ESR has organized public forums where speakers explained the history of the arms race and the nature of the present danger.

All during last winter, requests for information came into the ESR headquarters at the rate of more than 100 a week. Berman organized a volunteer staff to answer the letters and phone calls, using a basement office at the Lincoln School in Brookline.

The first national ESR conference on "educating for social responsibility" was held at Harvard University last Spring; more than 400 educators attended from around the country.

On the last day of the conference ESR members from more than a dozen states met to formally approve the creation of a national board of directors and to set the organization's priorities. In May, the board hired Herbert A. (Tony) Wagner as executive director of ESR.

Oct. 25: Focus on the issues of war and peace

On Oct. 25, during International Disarmament Week, teachers, students and parents across the nation will focus their attention on issues related to war and peace.

It will be "A Day of Dialogue," to begin exploring how nuclear issues should be dealt with in the classroom.

The focus will be to find out what students know and feel about nuclear weapons and the threat of nuclear war, and to create strategies for raising nuclear issues in the schools and integrating these materials into classrooms.

About 100 schools in Massachusetts will be participating.

The choice of the title, "A Day of Dialogue," reflects the belief of the group of educators who originated the idea that engaging in dialogue is the best means there is to resolve differences—from person-to-person disagreements to international disputes.

The idea was born in the mind of Brookline teacher Abby Endman, who proposed it during a peace conference held last spring at Harvard University under the auspices of the Boston-Cambridge Ministries in Higher Education.

The idea was approved unanimously at the conference. Educators for Social Responsibility, a Cambridge-based organization working for peace and a halt to the arms race, took up the idea and spread it across the nation through its 24 chapters.

Information about the proposed Day of Dialogue was sent to the chapters and to every educational association in the nation, and was publicized by the ESR newsletter and through other materials.

The Oct. 25 observance won the endorsement of the Massachusetts delegation to the NEA Representative Assembly last July. The resolution was not brought up on the assembly floor, however, because of a restriction in assembly rules. (The RA did, however, overwhelmingly endorse the nuclear arms race freeze campaign and reaffirmed teachers' long-standing commitment to peacemaking by the world's governments.)

Educators for Social Responsibility has prepared a 220-page looseleaf book, a planning and curriculum resource guide for the Day of Dialogue, that has become a popular item in the ESR book catalog. Between 25 and 50 orders for the book ($10 a copy for ESR members, $12 for others) are received every day at the ESR headquarters, 639 Massachusetts Ave., Cambridge.

Says Shelley Berman, program director of ESR: "We probably have 100 schools in Massachusetts that will take part in the Day of Dialogue. Nationally, the number is hard to say. Many of our chapters are getting the material out to people. It will be a large number.

"However, we are not looking for a media event. We want a day that has some substance for building toward instruction during the rest of the year. We want to give people some momentum.

"You can't teach the arms race in one week or one month. You need thorough and systematic addressing of nuclear issues in the curriculum."

Berman also says it is not essential that schools observe a Day of Dialogue on Oct. 25. "You can do it any time."

SHELLEY BERMAN . . .
'No media event.'

Nuclear issues conference Oct. 23

How pervasive are children's concerns about nuclear war, and how can teachers and parents respond to those concerns?

These will be among the issues addressed at a one-day conference Saturday, Oct. 23, at Wheelock College in Boston. Speakers will include teachers, psychologists, parents, and representatives of Educators for Social Responsibility, which is co-sponsoring the conference with the college.

Topics will include finding out how children think and feel about nuclear war, discussing politically controversial ideas in the classroom, curriculum ideas, and finding support in the community.

The fee of $28 includes lunch and program materials. For more information call the Center for Parenting Studies at Wheelock College, (617) 734-5200, ext. 214.

What teachers can do to raise students' awareness

What can teachers do to raise the awareness of their students and the community to the dangers of nuclear war?

A resource guide published by the Cambridge-based Educators for Social Responsibility has been designed to help teachers plan activities that will fit the needs of their individual schools.

ESR says, "The level of awareness about the issue will vary from community to community. This resource guide is really a collection of possibilities; no single plan will fit all situations."

Suggested activities:

1. Hold a classroom discussion or choose a classroom activity to assess what students know and feel about nuclear weapons and the threat of nuclear war.
2. Involve your department or a group of interested teachers in devoting one day to listening to what students feel and know. Meet after school to discuss what you found out.
3. Involve your school in a school-wide survey of student concerns, or an activity that assesses these concerns. Meet with a group to discuss the results and possible directions the school might take.
4. Call a meeting of interested educators to discuss strategies for raising the issue in your school.
5. Have a group of interested teachers phone or meet with administrators and school board members to discuss how best to approach nuclear issues in the school curriculum.
6. Spend a day listening to students' questions, concerns, and thoughts. Then hold a parent, teacher, and student meeting in the evening to discuss how best to educate students. Devote a meeting of the PTA to discussing this issue.
7. Establish a planning committee to start work on developing classroom materials on the nuclear issue and finding ways to integrate them into the curriculum.
8. Invite a speaker to talk to your faculty about education and nuclear issues.
9. Organize a teacher in-service workshop on teaching about nuclear issues or initiate a study group.
10. Meet with a group of interested students after school.
11. Bring in a speaker or film, or hold a debate, for an assembly of students. Meet with interested students and faculty after school.
12. Organize part of a day or a whole day for a symposium on the arms race and nuclear weapons. Topics of discussion might include the physics of an explosion; the medical, social, and environmental effects of a nuclear war; the history of the arms race; the basis for the fear of the Soviet threat; and proposed solutions and actions people can take to become involved.
13. Begin a week-long series or weekly series of films, speakers, and workshops on the arms race, including a dialogue to help students process the information.

S.T.O.P.—Help for high schools

The Student/Teacher Organization to Prevent Nuclear War—S.T.O.P. Nuclear War—is an NEA-backed group of high school students and teachers that works to educate high school students and their communities to the dangers of the arms race and the threat of nuclear war.

It also seeks to motivate young people to resist the arms race through positive, educational means.

S.T.O.P. Nuclear War is creating a network of local chapters around the country with programs that range from curriculum development to researching local civil defense plans.

The group also publishes a newsletter that features organizing ideas, facts on the arms race, and details of resources available for high school and youth groups.

For more information, write: S.T.O.P. Nuclear War, Box 232, Northfield, Mass. 01360.

Keeping track of resources

COPRED, the Consortium of Peace Research, Education, and Development, seeks to keep track of new resources that are constantly emerging in the area of peace research, education and advocacy.

NEA is an institutional member of COPRED, which has information on subjects that range from a study on the status of disarmament education to a comprehensive guide to war/peace films. The organization publishes a newsletter and a journal, sponsors conferences and workshops, and offers communications networks for educators and researchers.

For more information write: COPRED, Center for Peaceful Change, Kent State University, Kent, O., 44242.

APPENDIX C

FIVE CASE STUDIES

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I. AN ELEMENTARY APPROACH

At the Charles River School, a small private pre-Kindergarten through junior high school in Dover, Massachusetts, the Day of Dialogue involved the entire student body. Grades pre-Kindergarten through 4 used stories or discussions; grades 5-8 were vertically grouped to discuss "the future."

In pre-Kindergarten the teacher read The Stranger by Kjell Ringi and asked, "What does peace mean?" The Kindergarten class discussed The Story of the Little Fox by Stoecknicht, in which a fox tries futilely to prove himself to friends by killing other animals, and explored more gentle ways of showing friendship. First graders discussed war after hearing Drummer Hoff by Barbara Emberly. Second graders discussed things that made them angry -- mostly physical things -- and when asked what they should do about them, they all thought they should counter with physical force. They then read selections from My Shalom, My Peace written by Arab and Israeli children.

Third grades listened to "The Minstrel and the Mountain," a story about two kingdoms on opposite sides of a mountain. One king envies the other because his kingdom sees the sun rise, while the other king is jealous because his people see the sun set. The dialogue which followed evoked suggestions for both the kings and present-day nations.

The fourth graders read Udry's Let's Be Enemies and explored ways of settling arguments. As they were moving off to the next class they had an opportunity to test their ideas on negotiating as someone pushed to get ahead and a conflict broke out. The teacher stopped everyone and they examined ways the situation might have been resolved. Both the third and fourth grade classes saw the movie "Toys," a film about the reality represented by war toys, and discussed the difference between pretend and real war.

Grades five through eight formed small mixed groups in which they drew sketches of what the future would be like, brainstormed a web chart from the word conflict, and viewed the film "Toys."

The all-school assembly which ended the morning of their Day of Dialogue in many ways represented the serious -- and sometimes hopeful -- tone of the day's activities. Principal Anna Jones spoke to the students about listening, bringing the issues of the day down to the personal, childhood level and commending the children for their conscientious attempts to practice the difficult skill of listening and for their insights on resolving conflicts and "stopping fights." Carlotta Zilliax, a first grade teacher, described the work of the faculty committee devoted to peace studies; and Sharen Houghton, the art teacher, presented a gold paper peace crane. Pre-Kindergarteners displayed their folded cranes; the group sang "We Are All One Planet;" and Anna closed with a moment of silence and general handshaking.

Carlotta summed up the day:

> "Looking ahead many of us feel the Day of Dialogue is but a starting point for a year (and more) of dialogue, in which we need to think constructively with our students about the future, about our identity in the whole world community, and about the conflicts we may have in that community and in our own school and classroom communities."

II. DEPARTMENT BY DEPARTMENT

Lincoln-Sudbury Regional High School is located in the Boston suburb of Sudbury, Massachusetts, near several "high tech" companies involved in defense contracts, and many of the parents of Lincoln-Sudbury's 1400 students are employed by one of these companies. This factor, plus careful planning with each of the departments by Career Guidance Counselor Jeanne Barclay, produced a Day of Dialogue marked by the lively exchange of opinions in which students were urged to think "critically" about the nuclear question.

She and history teacher David Clapp decided to work on having a "day" in the fall when the whole school would look at the issue. Shortly afterward, when ESR announced the National Day of Dialogue, Barclay and Clapp felt their original idea was reinforced. They applied for and received four paid summer "workshop" days to organize their project.

At the first faculty meeting of the school year, Barclay announced the Day of Dialogue and passed out a check-list for interested teachers to request speakers or curriculum-related activities. At this point only about 20% of the teachers responded, but this gave the organizing team their start. They advertised and conducted two community meetings to bring out potential speakers on both sides of the issue. Meanwhile, ideas, largely from the ESR Guide, were passed on to interested teachers, whose number continued to grow as the Day of Dialogue approached. "Mini-workshops" at department meetings were also held to assist teachers in making decisions about activities. Each department developed its own contribution to the Day.

Several classes in the school worked on long-term projects in preparation for the Day. Art classes made over 1,000 "peace cranes" in keeping with the Japanese legend about peace. A mobile of their paper cranes is now on permanent display in the school library with the Japanese legend printed in calligraphy behind it. The drama department prepared a presentation of the play "Us-Them" emphasizing breaking down barriers between people. The home economics department developed a unit on world hunger and the arms race. About 95% of the school took part in a survey administered by Science teachers which gave students a chance to express their own feelings about the issues before hearing the opinions of others.

On the Day of Dialogue itself, two assemblies were held so that all students could hear the keynote speaker, Dr. Martin Schotz of Physicians for Social Responsibility. Then, in their regular classes, students heard one or more speakers give different points of view on the issue and participated in discussions, saw films, or viewed "Us-Them". The film "War Without Winners" was shown each period of the day for students who were free, or for whole classes.

Feedback forms, distributed throughout the day, revealed that, although the effectiveness of the speakers varied greatly, most students and teachers appreciated the opportunity to learn more about the issue, especially from both sides. Many people commented on how exciting it was to have the whole school -- students, teachers, administrators -- pondering, discussing, and arguing over the same question.

At Lincoln-Sudbury, Jeanne Barclay has gone on to pilot the course "Decision Making in a Nuclear Age", and several other teachers have used the Day of Dialogue as a starting point for units on nuclear education.

III. SOVIET-AMERICAN RELATIONS

At Noble and Greenough, a 7-12 private school in Dedham, Massachusetts, the focus of their Nuclear Awareness Day was Soviet-American relations. The faculty organizers, John Paine, Lisa Colt, Fred Sculco and Bob Reid, ensured that many perspectives were presented and that students had the opportunity to discuss the issues in small groups as well as to hear the speakers' presentations.

A great deal of discussion and self-questioning went into choosing a film that might begin the day and provide an overview of the seriousness of the problem. "War Games", "The Last Epidemic" and "No Frames, No Boundaries" were all discussed and the issue arose of whether the first two might be too frightening. To resolve this question a group of about 20 students and 20 to 30 parents and teachers got together to preview the latter two films, "War Games" having been shown the previous year. After seeing both films the students almost unanimously chose "The Last Epidemic" because it dramatically presented the problem and would shock students into taking it seriously. Many adults on the other hand preferred "No Frames, No Boundaries" because it was not so shocking and ended on a note of hope and optimism. Finally, the group decided to present both films to the whole 7-12 student body and provide about 45 minutes of discussion in small groups so that students and faculty could process the feelings these films generated.

The day began with a moving introduction by Rev. Blayney Colmore followed by the two films and the discussion groups. The students then returned to the auditorium for a unique experience: speeches by Jack Mendelson of the State Department, Vitaly Zhurkin of the Soviet embassy, and Jose Maria Otegui of the Argentine embassy who presented the Third World perspective. All were powerful, but the students were fascinated by the Soviet perspective. "He was just tring to win us over", a number of students commented in a later workshop, reflecting a suspicion and skepticism. Later that day, during the final panel discussion, one of the panelists accused the Russians of being a slave state and the incarnation of evil on Earth. Zhurkin's response that there was no way to respond to such a slanderous statement drew a resounding applause from the student audience.

Following these introductory speeches came a dozen workshops, each repeated once so that students could attend two if they wished. The presenters included a Soviet dissident, a staff member of the Institute for Defense & Disarmament Studies, representatives of the Americans Against a Freeze, and a representative from the Center for the Study and Practice of Christian Non-Violence.

The topics included "Decision Making in a Nuclear Age", "Effect of the Arms Buildup on the Russian Economy and Policies", "Strategic Weapons Placement in Germany", "Methods of Nuclear Weapons Verification", "Comparative Nuclear Strength: USA and USSR", "Nuclear Free Zones", "Long Range Atmospheric Effects" and many others.

The closing session was again in the auditorium where students questioned a panel of workshop leaders for an hour. Questions dealt with Soviet-American relations, verification, balance of power, and negotiations. One student expressing her concern and frustration asked, "I feel helpless right now. Beyond the moral question -- we all agree that nuclear weapons are wrong -- it comes down to the struggle between democracy and communism. I keep running into walls. I just want to get rid of these weapons. I can protest, but ultimately there is not much I can do. Can any one of you suggest any way in which I can do something that will make a difference?"

The panel struggled with that somewhat inadequately for it was difficult for them to step out of the complex detail and engage this simple yet clear statement. Rev. Colemore presented the closing remarks, words of hope and of commitment to making a difference.

IV. FUTURES: A JUNIOR HIGH EVENT

Carlisle Junior High School, in Carlisle, Massachusetts, had planned a three-day break in the normal schedule to focus on issues related to "The Future". The event was planned by John Doria, a teacher, Matt King, the Superintendent, and Richard Deppe, the Assistant Superintendent, yet the effort was a collaborative one among the whole faculty. The discussion of the nuclear threat was set within the context of other issues students would confront in the future, such as aging and technological advances. Each student was given a 21-page journal which was developed by the faculty and included such activities as a survey of how the future would look, "10 changes I want to see in the world in the 21st century", "20 things about me that will change in the future", "5 things that will become obsolete", "personal feelings about old age", a will, a newspaper front page to be filled in, and many spaces to draw and write reactions. Students were divided into groups of 6th, 7th, and 8th graders, each group representing a mix of grades.

Within this context came the discussion of the nuclear threat. The science teachers had spent time preparing the students on the issue of nuclear fission and fusion. The format for the discussion was a mock hearing on the nuclear freeze proposal. Packets of information were developed for six different perspectives: the military, business, physicians, ecologists, third world countries, and religious organizations. Students were divided into teams and each group prepared its position for the hearing.

On the first day of the event the faculty held a mock hearing simulating in brief the next day's hearing. Students then met in the groups to review the literature they had been given, to prepare arguments, and to choose one or two representatives to speak on the panel. The next morning the student hearing took place. Each perspective was presented with time allocated for rebuttal and then questions. Finally, after small group discussions and time for thought, they voted on the freeze (which won by a vote of 193 to 32, with two abstentions).

The event moved on to hearing from retired citizens, viewing the film "Farenheit 451", dressing up in future costumes, writing in their journals, and burying a time capsule. The following comments from students' journals reveal how much they gained from this experience.

"I found the unit on the Future that we did was very helpful to me. I have always had great fears about the future and what it holds for me. This unit brought these fears into the forefront for me, and helped me deal with them in a calm, cool way."

"The thought of a nuclear war terrifies me, but after the debate we had I saw that there were enough people who wanted to help and get involved to stop this nuclear madness."

"I've seen the newspapers and news on television on how some schools are teaching about nuclear war and how they think the kids have a right to know and should know what's going on in their world. Then on the other hand how schools don't want to teach about the nuclear war because it scares the kids and might teach it at too early of an age. However, I was a little scared at first but the more I learned the more I felt comfortable in talking and hearing about it. Now I keep up with the nuclear war news by reading newspapers and watching the news."

V. A SCHOOL-WIDE SYMPOSIUM

At St. Dominic Savio, a Catholic boys' school in East Boston, it was Bill Powers' senior class on 20th Century World Affairs who planned and organized the day-long event. Having spent a good deal of time as a class discussing the issue, they decided that one way to make a difference was to share their concern with the whole student body. As a class they determined the format and found speakers. Each student took on a particular task whether it was contacting a speaker or asking a local merchant to donate donuts. One student remarked, "We're proud of the day. We did it. I mean, Mr. Powers helped, but we did it."

Bill and his class surveyed the students at St. Dominic Savio and found that 80% of the school didn't know what Civil Defense was. The three main topics the students wanted to know more about were the effects of nuclear war, Soviet-American relations, and the nuclear arms race and arms control. Also, 95% of the school wanted to have an assembly on the issue. The results of this survey moved the faculty and administration to support the idea of an assembly.

There were four main speakers involved in the Nuclear Awareness Day. Lachlan Farrow of Physicians for Social Responsibility, Clay Clements of the Institute for Policy Analysis at Tufts, Father McLaughlin of Pax Christi, and Douglas Forbes of the Civil Defense in Framingham.

Students were grouped by grade, and each grade heard 40-minute presentations by each of the four speakers. Farrow presented a moving slide show and lecture on the effects of a nuclear war, contending that it was not survivable. Forbes presented the Federal Emergency Management Agency's position that with enough notice and adequate preparation we could survive. Clements presented a powerful argument on the need "to defend against the Soviet threat," and Father McLaughlin presented a pacifist perspective while asking the questions "Who chooses your enemy?" and "Who profits from war preparations?"

After lunch all the students assembled in the gym to hear a brief summation from each speaker and ask questions. The most difficult challenge for the students, as revealed by their questions, was understanding how to balance their distaste for the authority of the President with their desire to prevent nuclear war.

VI. A SYSTEM-WIDE DAY

Corinne Greene, a special education teacher, involved the whole of the Falmouth, Maine public schools in the Day of Dialogue. Falmouth, a progressive community, had already taken some initial steps to deal with nuclear issues. In August, 1982, the school board mandated that nuclear weapons be a theme for the school year. This set the stage for Greene to approach the Superintendent and administrators about the Day of Dialogue. After reviewing the Day of Dialogue Guide and Greene's proposal, the administration mandated that all teachers grades 4-12 participate and that teachers in K-3 participate at their discretion. Greene met with all the teachers in curriculum workshops to prepare for the Day and found them to be "very supportive".

At the K-3 level teachers began to prepare children for alternatives to violence as a means of resolving conflicts. They used Shel Silverstein's "Hug O'War" poem, "The Hating Book" and "Apple War Story" by Bernice Myers to initiate discussions.

In grades 4-6 students examined the factors that bring about a peaceful class, family, neighborhood and world. They developed web charts around the word conflict and discussed why violence is so pervasive. Some teachers used the song "Let There Be Peace on Earth" to start a discussion. Art projects grew around the theme "Help Each Other Out". Some classes played cooperative games. Others read the article on nuclear weapons in the September 23, 1982 Scholastic News. Children wrote petitions and gathered signatures in their neighborhood; they wrote letters to Washington; they held a concert of peace songs.

At the middle school level the teachers felt that it was important to bring the issue down to a personal level so that students would be able to "own" the problem. Classes examined and evaluated the adequacy of Falmouth's civil defense plans and shelters. They also envisioned what life might be like in the year 2002: how will things have changed? what will have been done in the next 20 years?

High school students held a debate, "Escalate to Deter, or, Escalate Brings Us Closer to Armageddon." They read the Boston Globe supplement on the arms race and other news articles and discussed the issue in their classes.

The Falmouth school system continued its efforts throughout the year, and Corinne Greene was instrumental in securing the support of Commissioner of Education Harold Reynolds for a statewide teachers' conference in Spring, 1983 on the teaching of nuclear issues.